



**Inland Group**

Comprehensive Multifamily Construction & Development Services

Sketch Plan

Ranchwood Minor Subdivision

Tract B

Copper Ranch at Erie, CO



# Inland Group

Comprehensive Multifamily Construction & Development Services

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4. Letter of authorization
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7. Phase 1 drainage study
8. Geological Assessment



**TOWN OF ERIE**  
Community Development Department – Planning Division  
645 Holbrook Street – PO Box 750 – Erie, CO 80516  
Tel: 303.926.2770 – Fax: 303.926.2706 – Web: [www.erieco.gov](http://www.erieco.gov)

### LAND USE APPLICATION

*Please fill in this form completely. Incomplete applications will not be processed.*

STAFF USE ONLY			
FILE NAME:			
FILE NO:	DATE SUBMITTED:	FEES PAID:	

**PROJECT/BUSINESS NAME:** Copper Ranch At Eire, CO

**PROJECT ADDRESS:** TBD - Tract B Ranchwood Minor Subdivision

**PROJECT DESCRIPTION:** Sketch plan application subdividing tract b into four lots with HR and CC zoning and to propose development of 216 family apartment units with associated clubhouse and site amenities.

**LEGAL DESCRIPTION** *(attach legal description if Metes & Bounds)*

Subdivision Name: Tract B in the Ranchwood Minor Subdivision

Filing #:	Lot #:	Block #:	Section: <u>24</u>	Township: <u>1N</u>	Range: <u>69W</u>
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**OWNER** *(attach separate sheets if multiple)*

Name/Company: Legacy Bank

Contact Person: Michael Chaloner

Address: 2801 West Memorial Road

City/State/Zip: Oklahoma City, OK 73134

Phone: 405-748-2045 Fax: \_\_\_\_\_

E-mail: mikec@legacybank.com

**AUTHORIZED REPRESENTATIVE**

Company/Firm: Cap Acquistions, LLC

Contact Person: Robert Ketner

Address: 120 W. Cataldo, suite 100

City/State/Zip: Spokane, WA 99201

Phone: 509-321-3204 Fax: 509-922-2251

E-mail: robertk@inlandconstruction.com

**MINERAL RIGHTS OWNER** *(attach separate sheets if multiple)*

Name/Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

**MINERAL LEASE HOLDER** *(attach separate sheets if multiple)*

Name/Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

**LAND-USE & SUMMARY INFORMATION**

Present Zoning: CMU

Proposed Zoning: HR (13.5 acres), CC (12.56 acres), 2.59 ROW

Gross Acreage: 28.65

Gross Site Density (du/ac): \_\_\_\_\_

# Lots/Units Proposed: 216 units for HR (13.5 acres)

Gross Floor Area: \_\_\_\_\_

**SERVICE PROVIDERS**

Electric: Xcel Energy

Metro District: \_\_\_\_\_

Water *(if other than Town)*: \_\_\_\_\_

Gas: Xcel Energy

Fire District: Town of Erie operated by Mountain View Fire

Sewer *(if other than Town)*: \_\_\_\_\_

**PAGE TWO MUST BE SIGNED AND NOTARIZED**

DEVELOPMENT REVIEW FEES			
<b>ANNEXATION</b>		<b>SUBDIVISION</b>	
<input type="checkbox"/> Major (10+ acres)	\$ 4000.00	<input checked="" type="checkbox"/> Sketch Plan	\$ 1000.00 + 10.00 per lot
<input type="checkbox"/> Minor (less than 10 acres)	\$ 2000.00	<input type="checkbox"/> Preliminary Plat	\$ 2000.00 + 40.00 per lot
<input type="checkbox"/> Deannexation	\$ 1000.00	<input type="checkbox"/> Final Plat	\$ 2000.00 + 20.00 per lot
<b>COMPREHENSIVE PLAN AMENDMENT</b>		<input type="checkbox"/> Minor Subdivision Plat	\$ 2000.00
<input type="checkbox"/> Major	\$ 3000.00	<input type="checkbox"/> Minor Amendment Plat	\$ 1000.00 + 10.00 per lot
<input type="checkbox"/> Minor	\$ 1200.00	<input type="checkbox"/> Road Vacation (constructed)	\$ 1000.00
<b>ZONING/REZONING</b>		<input type="checkbox"/> Road Vacation (paper)	\$ 100.00
<input type="checkbox"/> Rezoning	\$ 1700.00 + 10.00 per acre	<b>SITE PLAN</b>	
<input type="checkbox"/> PUD Rezoning	\$ 1700.00 + 10.00 per acre	<input type="checkbox"/> Residential	\$ 1400.00 + 10.00 per unit
<input type="checkbox"/> PUD Amendment	\$ 1700.00 + 10.00 per acre	<input type="checkbox"/> Non-Resi. (>10,000 sq. ft.)	\$ 2200.00
<input type="checkbox"/> Major PD Amendment	\$ 3700.00 + 10.00 per acre	<input type="checkbox"/> Non-Resi. (>2,000 sq. ft.)	\$ 1000.00
<input type="checkbox"/> Minor PD Amendment	\$ 500.00	<input type="checkbox"/> Non-Resi. (<2,000 sq. ft.)	\$ 200.00
<b>SPECIAL REVIEW USE</b>		<input type="checkbox"/> Amendment (major)	\$ 1100.00
<input type="checkbox"/> Major	\$ 1000.00	<input type="checkbox"/> Amendment (minor)	\$ 350.00
<input type="checkbox"/> Minor	\$ 400.00	<b>VARIANCE</b>	\$ 600.00
<input type="checkbox"/> Oil & Gas	\$ 1200.00	<b>SERVICE PLAN</b>	\$ 10,000.00
<i>All fees include both Town of Erie Planning &amp; Engineering review. These fees do not include referral agency review fees, outside consultant review fees, or review fees incurred by consultants acting on behalf of staff. See Town of Erie Municipal Code, Title 2-10-5 for all COMMUNITY DEVELOPMENT FEES.</i>			

The undersigned is fully aware of the request/proposal being made and the actions being initiated on the referenced property. The undersigned understand that the application must be found to be complete by the Town of Erie before the request can officially be accepted and the development review process initiated. The undersigned is aware that the applicant is fully responsible for all reasonable costs associated with the review of the application/request being made to the Town of Erie. Pursuant to Chapter 7 (Section 7.2.B.5) of the Unified Development Code (UDC) of the Town of Erie, applicants shall pay all costs billed by the Town for legal, engineering and planning costs incurred by staff, including consultants acting on behalf of staff, necessary for project review. By this acknowledgement, the undersigned hereby certify that the above information is true and correct.

Owner: \_\_\_\_\_ Date: \_\_\_\_\_

Owner: \_\_\_\_\_ Date: \_\_\_\_\_

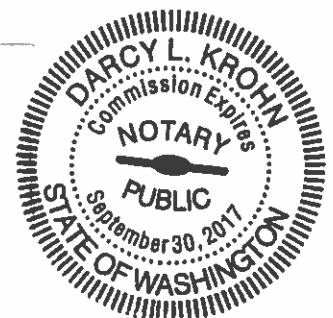
Applicant: Robert Ketner Date: 7/28/16

STATE OF WASHINGTON )  
~~COLORADO~~ ) ss.  
 County of SPokane )

The foregoing instrument was acknowledged before me this 28<sup>th</sup> day of July, 2016, by Robert Ketner.

My commission expires: 9/30/2017.  
 Witness my hand and official seal.

Darcy L. Krohn  
 Notary Public





# Inland Group

**Sketch Plan Narrative  
Copper Ranch at Erie, CO  
216 Family Apartments  
Ranchwood Minor Subdivision (Tract B)**

## **Project Concept and Summary of Request**

This sketch plan application proposes to subdivide and rezone 28.65 acres known as Ranchwood Minor Subdivision (Tract B) into four lots with a mixture of High-Density Residential (HR) and Community Commercial (CC) from its existing state of a single tract zoned Community Mixed-Use (CMU). Two of the lots, comprising of 13.5 acres, would be immediately developed as HR creating 216 family apartment units with a density of 16 units per acre. The remaining lots, comprising of 12.56 acres, would be rezoned to CC for future development. Additionally, 2.59 acres of the development would become public ROW. The 28.65 acre site fronts both E. County Line Road and Erie Parkway although is separated from their intersection by another parcel not part of the application, Ranchwood Minor Subdivision (Tract A) which is zoned Business (B). The proposed HR land is located in the northwest portion of the site leaving CC zoning to front the major arterials.

Interestingly, the current zoning of CMU actually allows both use types proposed by the rezone. The HR and CC uses shown on the sketch plan are in fact allowed uses within the current CMU zoning designation, however the CMU zoning requires that at least three uses from different categories are included, and no more than one use can contain more than 50% of the entire building area. The rezone really serves to more appropriately size both the multifamily residential and commercial uses, with the multifamily uses helping drive demand for high quality, diversified commercial uses.

The intent of this application is to provide detailed concept information about our proposed 216 unit apartment community and receive input from the Town of Erie's Staff, Planning Commission, and Board about its feasibility and the level of interest the Town may have for expanding its housing accommodations.

Further detail in this sketch plan submittal applies only to the residential acreage, as the commercial acreage would be reserved for future development.

## **Land Area & Lots**

Total land area: 28.65 acres

Proposed HR: 13.5 (2 lots consisting of 2.25 & 11.25 acres)

Proposed ROW: 2.59 acres

Proposed future CC: 12.56 (2 lots consisting of 10.81 and 1.75 acres)

The sketch plan includes a conceptual commercial use shown for the 1.75 acre CC lot in order to help visualize its potential. This lot would be a future development.



# Inland Group

## **Open Space**

The proposed multi-family development doesn't allow for preservation of park or open space within the lot area and we will be requesting to pay fees in lieu. We calculated our area to be dedicated as defined in Section 10.6.3 of the UDC using 2.79 persons per dwelling unit as: 1.81 acres for Neighborhood Park, 3.01 for Community Park, and 10.23 acres for Open Space. Our proposed plan does include .47 acres to meet the Pocket Park requirement of .3 acres.

Our site plan does preserve 42% of the total area for landscaping and private open space. If the Town's parking requirement could be reduced to our proven parking demand for this product type (1.8 stalls per unit), the landscaping and private opens space could be increased to 47% of the site.

Our site plan proposes to underground the Leyner Cottonwood Ditch drainage as it passes through the multi-family site. The existing trail system will be continued through the sites pocket park and reconnect on the east side of the proposed Ranchwood Avenue.

## **Phasing**

The multi-family site will be built at once over a period of 16 months. There is no active plan for the commercial sites and no time line for its construction.

## **Utilities and Services**

The site is served by: Town of Erie for water, waste water, and storm water outfall system, Xcel Energy for gas & electric, Comcast for television, and Century Link for telephone. We have preliminary confirmation that all of these utilities are within close proximity to the site and can provide service for the proposed 216 unit multi-family project.

St. Vrain has confirmed capacity within its school district to serve the project and the site is within the operation areas of Erie Police Department and Mountain View Fire Protection District, station #6.

## **Maintenance**

The multi-family development will remain under the ownership and management of the Inland Group. All of the maintenance for the private facilities will be conducted by or directed by an on-site staff responsible for implementing the Inland Group's "Maintenance Plan" that establishes the apartment community's need for a well maintained property as a primary goal for attracting and retaining tenants.

We assume the public street easements bordering and dividing the site would become dedicated ROW at the end of construction and maintenance along with ownership would be turned over to the Town of Erie.



# Inland Group

## **Native Tree & Vegetation Survey**

The site is currently native grass with fewer than 10 small trees located on the entire 28 + acres. All but two of these trees are located within the Leyner Cottonwood Ditch, which would be relocated underground on the multi-family site. None of the existing trees will be preserved as the concept is currently proposed. The multi-family development will include approximately 240 new trees in order to create a scenic apartment community while meeting the landscaping and street improvement requirements of the UDC.

# ALTA/NSPS LAND TITLE SURVEY

**PROPERTY DESCRIPTION**

Tract B, Ranchwood Minor Subdivision, County of Boulder, State of Colorado.

## Tract B, Ranchwood Minor Subdivision, County of Boulder, State of Colorado

(For Recording Purposes: Part of the Northeast Quarter of Section 24, Township 1 North, Range 69 West of the 6th P.M.)

**BASIS OF BEARINGS AND LINEAL UNIT DEFINITION**

Assuming the East line of the Northeast Quarter of Section 24, T.1N., R.69W., as bearing South 00°30'34" East being a Grid Bearing of the Colorado State Plane Coordinate System, North Zone, North American Datum 1983/2011, a distance of 2652.79 feet with all other bearings contained herein relative thereto.

The lineal dimensions as contained herein are based upon the "U.S. Survey Foot."

**NOTICE**

According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon. (13-80-105 C.R.S. 2012)

**SURVEYOR'S NOTES**

- Property Address: No address posted.
- The subject property is in flood zone "X", "areas determined to be outside the 0.2% annual chance flood plain" per FEMA flood map 08013-C-0441-J revised December 18, 2012.
- No observable evidence of earth moving work, building construction or building additions within recent months.
- No buildings existing on the surveyed property.

**SURVEYOR'S CERTIFICATE**

To: CAP Acquisitions, LLC, A Washington limited liability company  
Legacy Bank, an Oklahoma state banking company  
Chicago Title Insurance Company  
Inland Group

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 8, 11, 13, & 16 of Table A thereof. The field work was completed on February 26, 2016.

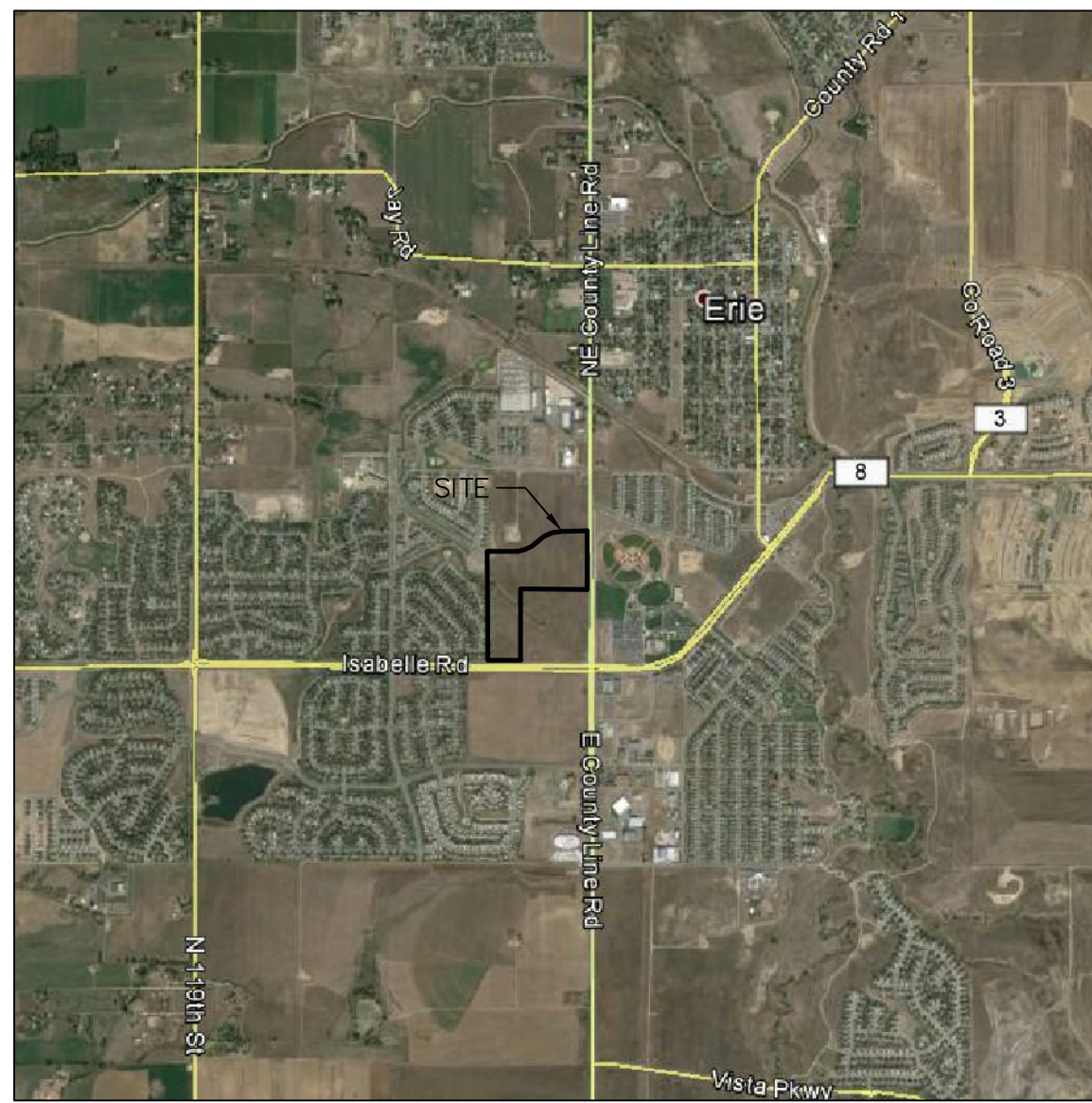
Date of Plot or Map: March 9, 2016

**PRELIMINARY**

Steven A. Lund - On Behalf Of King Surveyors  
Colorado Registered Professional  
Land Surveyor #34995

This survey does not constitute a title search by King Surveyors to determine ownership or easements of record. For all information regarding easements, rights-of-way and title of records, King Surveyors relied upon Title Commitment Number 097-C2017955-058-LGI, dated December 22, 2015 at 7:00 a.m., as prepared by Chicago Title Insurance Company to delineate the aforesaid information.

That this certificate does not extend to any unnamed parties or the successors and/or assigns of CAP Acquisitions, LLC, A Washington limited liability company, Legacy Bank, an Oklahoma state banking company, Chicago Title Insurance Company



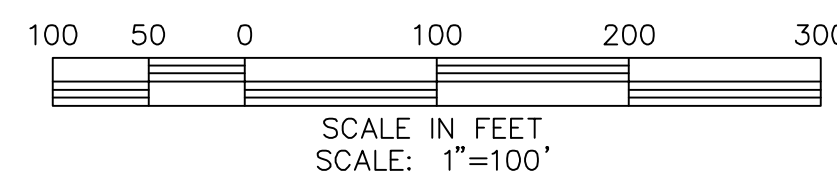
**VICINITY MAP**  
(NOT TO SCALE)

**SCHEDULE B EXCEPTIONS**

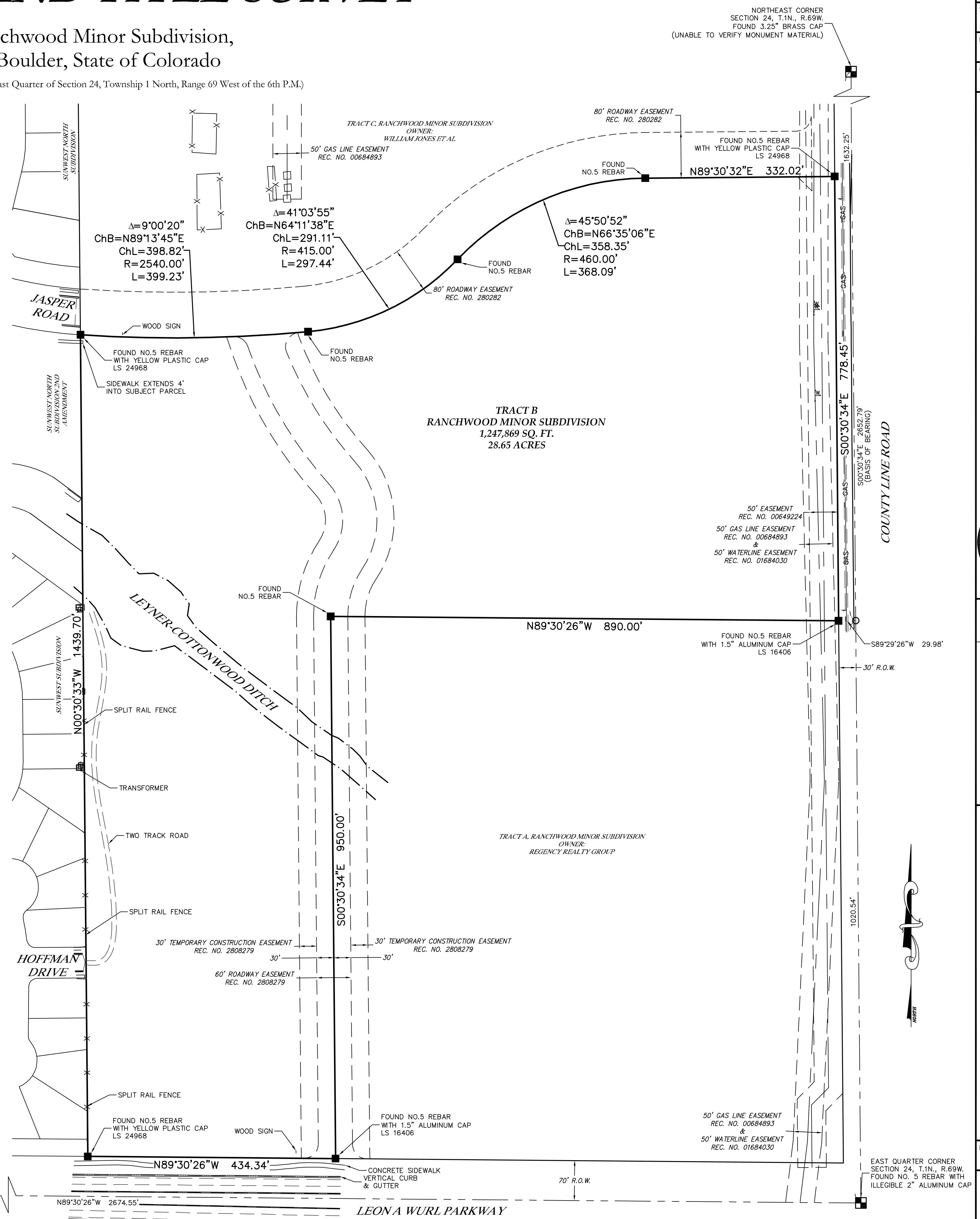
- Any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws and decisions of courts; and also the right of the proprietor of a vein or lode to extract or remove his ore, should the same be found to penetrate or intersect the premises thereby granted as reserved in the United States Patent recorded June 27, 1874 in Book Vol Page 595, and any and all assignments thereof or interests therein. (NOT PLOTTABLE)
- An undivided 1/3 interest in all oil, gas and other minerals underlying the land and rights appurtenant thereto as set forth in Mineral Deed recorded June 30, 1982 at Reception No. 500493, and any and all assignments thereof or interests therein. (NOT PLOTTABLE)
- An undivided 1/3 interest in all oil, gas and other minerals underlying the land and rights appurtenant thereto as set forth in Mineral Deed recorded June 30, 1982 at Reception No. 500494 and in Personal Representative's Mineral Deed recorded December 27, 1995 at Reception No. 1572530, and any and all assignments thereof or interests therein. (NOT PLOTTABLE)
- An undivided 1/3 interest in all oil, gas and other minerals underlying the land and rights appurtenant thereto as set forth in Mineral Deed recorded June 30, 1982 at Reception No. 500495, and any and all assignments thereof or interests therein. (NOT PLOTTABLE)
- Easements to install, construct, maintain alter, repair, replace, reconstruct, operate and remove pipelines specified under the Right of Way Easement, which was recorded September 28, 1984 at Reception No. 649224. (PLOTTED)
- An Oil and Gas Lease, executed by Charles R. and Ella M. Travis, Hazel Mae Bevel and Edward D. Smith, and Edward D. Smith and Lady Angeline Smith as lessor(s) and by Todd T. Hitchings as lessee(s), for a primary term of one year, dated May 1, 1983, recorded March 4, 1985 at Reception No. 674953, as amended by instruments recorded July 28, 1983 at Reception No. 664978, March 4, 1985 at Reception No. 674954 and at Reception No. 674955, and any and all assignments thereof or interests therein.  
Note: Notice of Right to Use Surface of Lands recorded January 9, 1998 at Reception No. 1761802.  
Note: Declaration of Utilization recorded June 17, 1985 at Reception No. 686036. License Agreement recorded August 19, 1997 at Reception No. 1723359, Leyner-Cottonwood Consolidated Ditch Company License to Modify Easement recorded August 21, 1997 at Reception No. 1724485 and Amendment recorded November 9, 2001 at Reception No. 2217959. (NOT LOCATED ON SUBJECT PARCEL)
- Notice Concerning Underground Facilities, which was recorded June 25, 1986 at Reception No. 768891, and any easements affecting subject property evidenced thereby. (NOT PLOTTABLE)
- Easements construct, install, lay, operate, maintain, alter, repair and remove a gas pipe line as specified under the Right of Way Easement, recorded May 7, 1985 at Reception No. 686036. License Agreement recorded August 19, 1997 at Reception No. 1723359, Leyner-Cottonwood Consolidated Ditch Company License to Modify Easement recorded August 21, 1997 at Reception No. 1724485 and Amendment recorded November 9, 2001 at Reception No. 2217959. (NOT LOCATED ON SUBJECT PARCEL)
- Notice Concerning Underground Facilities, which was recorded June 25, 1986 at Reception No. 768891, and any easements affecting subject property evidenced thereby. (NOT PLOTTABLE)
- The effect of the inclusion of the subject property in the Northern Colorado Water Conservancy District, as disclosed by the instruments recorded February 7, 1992 at Reception No. 1159956, and at Reception No. 1159957, February 14, 1994 at Reception No. 1394467 and January 21, 1997 at Reception No. 1671966. (NOT PLOTTABLE)
- Easements installation, construction, repair, cleaning, maintenance, replacement operation and use of a 12" water line for the Town of Erie and appurtenances thereto specified under the Grant of Non-Exclusive Easement, which was recorded March 18, 1997 at Reception No. 1684030. (PLOTTED)
- Easements, terms, conditions, provisions, agreements and obligations specified under the Agreement, which was recorded September 2, 1997 at Reception No. 1727370. (NOT PLOTTABLE)
- Terms, conditions, provisions, agreements and obligations specified under the Request for Notification of Surface Development, which was recorded April 11, 2006 at Reception No. 2769130. (NOT PLOTTABLE)
- Easements, notes, terms, conditions, provisions, agreements and obligations as shown on the plat of Ranchwood Minor Subdivision recorded September 28, 2006 at Reception No. 2807859. (PLOTTED)
- Terms, covenants, conditions, provisions, agreements and obligations specified under the Easements, Covenants and Conditions, recorded September 29, 2006 at Reception No. 2808279. (PLOTTED-IT IS UNKNOWN IF CONDITIONS WERE MET TO CREATE THESE EASEMENTS.)
- Easements, terms, covenants, conditions, provisions, agreements and obligations specified under the Easements and Covenants, recorded September 29, 2006 at Reception No. 2808280. (NOT PLOTTABLE, NO SPECIFIC LOCATION DEFINED)
- Terms, covenants, conditions, restrictions, provisions, agreements and obligations specified under the Use Restriction Agreement, recorded September 29, 2006 at Reception No. 2808281. (NOT PLOTTABLE)
- Terms, covenants, conditions, provisions, agreements and obligations specified under the Easements, Covenants and Conditions, recorded September 29, 2006 at Reception No. 2808282. (PLOTTED-IT IS UNKNOWN IF CONDITIONS WERE MET TO CREATE THESE EASEMENTS.)
- Terms, covenants, conditions, restrictions, provisions, agreements and obligations specified under the Memorandum of Compatible Development and Surface Use Agreement, recorded April 25, 2007 at Reception No. 2851245, and under the Agreement disclosed therein. (NOT PLOTTABLE)
- Terms, conditions, provisions, agreements and obligations specified under the Ranchwood Minor Subdivision, Tract B Zoning Map, which was recorded February 5, 2008 at Reception No. 2908451. (NOT PLOTTABLE)
- Any existing leases or tenancies, and any and all parties claiming by, through or under said lessees. (NOT PLOTTABLE)

**LEGEND**

	EDGE OF ASPHALT		CABLE TV PEDESTAL
	FLOWLINE		ELECTRIC BOX
	TOP OF BANK		TELEPHONE PEDESTAL
	FENCE LINE		WATER MARKER
	EASEMENT LINE		REFLECTOR POST
	SECTION LINE		FOUND ALIQUOT CORNER AS DESCRIBED
	BOUNDARY LINE		FOUND MONUMENT AS DESCRIBED
			CALCULATED POSITION



CENTER QUARTER CORNER SECTION 24, T.1N., R.69W. FOUND NO. 6 REBAR WITH 2" ALUMINUM CAP LS 28286



DATE:	3-10-2016
FILE NAME:	20160118ALTA
SCALE:	1"=100'
DRAWN BY:	SIP
CHECKED BY:	SIP

**KING SURVEYORS**  
650 E. Garden Drive | Windsor, Colorado 80550  
phone: (970) 686-5011 | email: info@KingSurveyors.com



DATE:	
REVISIONS:	

ALTA/NSPS LAND TITLE SURVEY  
FOR  
INLAND GROUP  
120 W. CATALDO AVENUE SUITE 100  
SPOKANE, WA 99201

PROJECT #:  
20160118



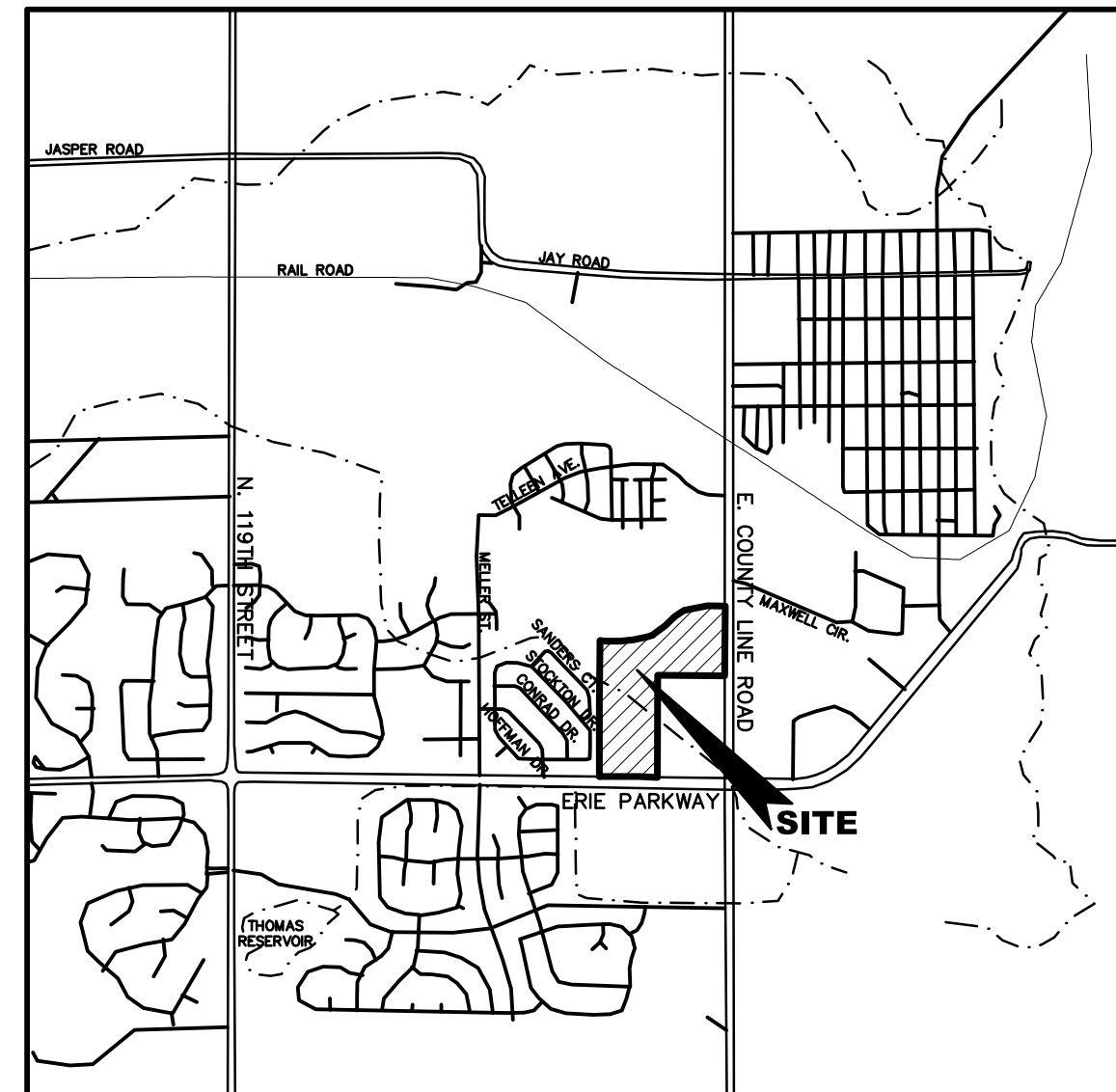
# COPPER RANCH

## RANCHWOOD TRACT B SKETCH PLAN

**A PARCEL LOCATED IN THE NORTHEAST 1/4 OF SECTION 24, TOWNSHIP 1 NORTH,  
RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN,  
TOWN OF ERIE, COUNTY OF BOULDER, STATE OF COLORADO**

**28.650 ACRES - 4 LOTS - 0 TRACTS**

**SK-000806-2016**



**VICINITY MAP**  
1"=2000'

### SHEET INDEX

- T1 (1) TITLE SHEET
  - SP1 (2) OVERALL SITE PLAN
  - SP2 (3) DEVELOPMENT SITE PLAN
  - EC1 (4) EXISTING CONDITIONS
  - ARCH (5) ARCHITECTURAL SITE PLAN
  - ARCH (6) ARCHITECTURAL ELEVATIONS
  - ARCH (7) ARCHITECTURAL ELEVATIONS
- 7 TOTAL SHEETS

### CONTACTS:

#### THE TOWN OF ERIE

645 HOLBROOK STREET  
P.O. BOX 750  
ERIE CO 80516  
PHONE: (303) 926-2773  
CONTACT: TODD BJERKAAS

#### DEVELOPER

COPPER RANCH APARTMENTS, LLC  
120 W. CATALDO, SUITE 100  
SPOKANE, WA 99201  
PHONE: (509) 321-3204  
CONTACT: ROBERT KETNER

#### ENGINEER / PLANNER

CALIBRE ENGINEERING, INC.  
9090 SOUTH RIDGELINE BLVD, SUITE 105  
HIGHLANDS RANCH, CO 80129  
PHONE: (303) 730-0434  
CONTACT: TODD JOHNSON

#### ARCHITECT

TAO  
499 MAIN STREET  
BOISE, ID 83702  
PHONE: (208) 343-2931  
CONTACT: JOHN PRICE

### LAND SUMMARY CHART

TYPE	AREA (AC.)	% OF TOTAL AREA
LOTS-HDR	13.50	47.12
LOTS-CC	12.56	43.84
TRACTS	0.00	0.00
PUBLIC ROW	2.59	9.04
TOTAL	28.65	100.00

### PARKS AND OPEN SPACE SUMMARY (RESIDENTIAL ONLY - 13.5 ACRES/216 UNITS)

TYPE	REQUIRED (ACRES)	PROVIDED (ACRES)
PP	0.30	0.47
NP	1.81	-
CP	3.01	-
OS	10.23	-

PATH: P:\INLAND ERIE\CADD\CIVIL\13 SKETCH PLAN\13T1.DWG  
 PLOTTED BY: KYLE HOFFMEISTER DATE: 9/6/2016 1:33 PM  
 XREFS: VICINITY MAP, 13TB

DATE	REVISION	DESCRIPTION


Drawing Name 13T1.dwg			
Job Number INLAND ERIE			
Prepared For INLAND	Designer LMA	Drafter LMA	Checked RWL

Calibre Engineering, Inc.  
9090 South Ridgeline Boulevard, Suite 105  
Highlands Ranch, CO 80129 (303) 730-0434  
www.calibre-engineering.com  
Construction Management Civil Engineering Surveying

## COPPER RANCH

### RANCHWOOD TRACT B SKETCH PLAN

# TITLE SHEET

Sheet <b>T1</b>	1 of 7
Date SEPTEMBER 6, 2016	

**ZONING CODE LEGEND**

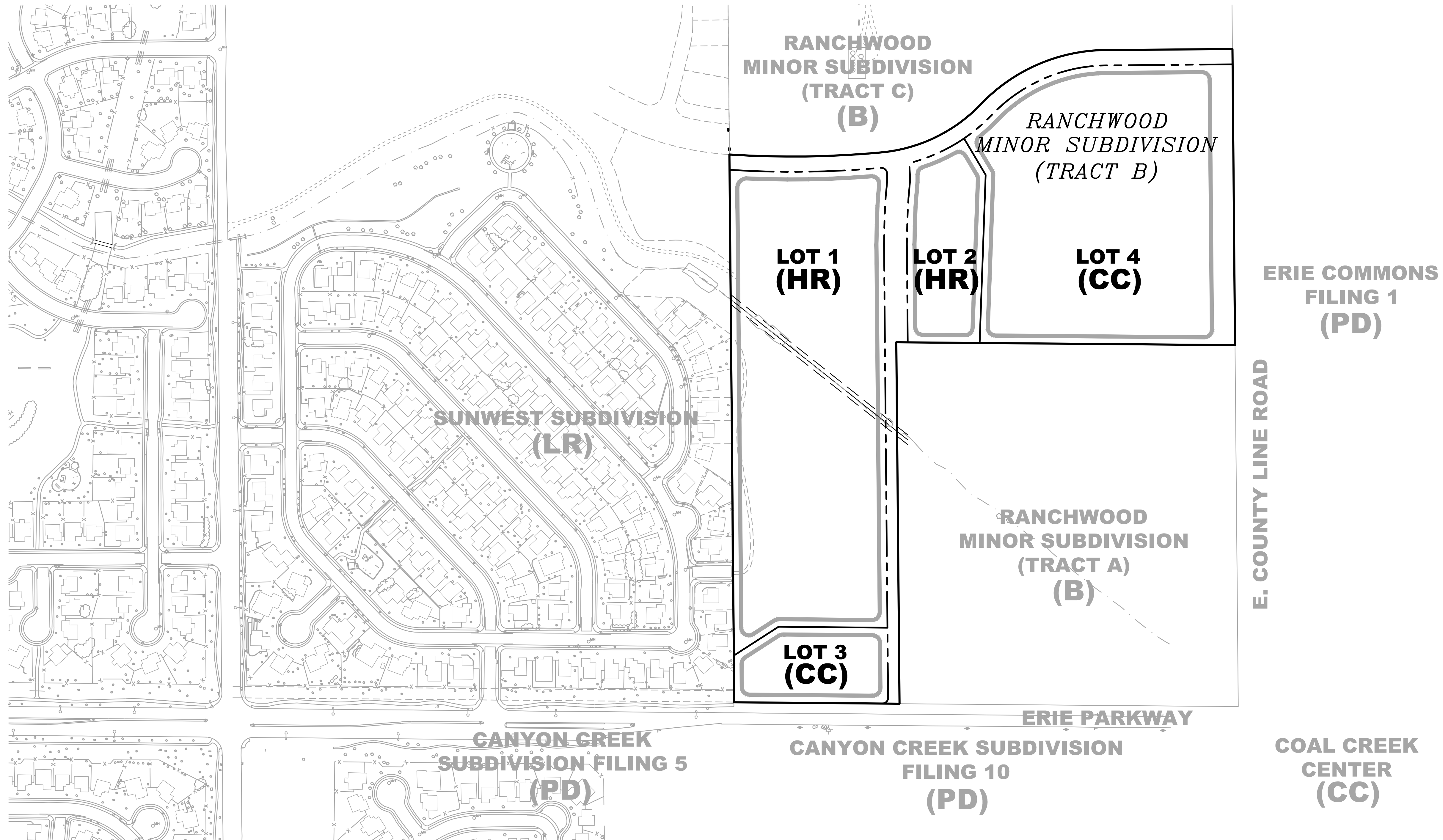
B = BUSINESS  
 CC = COMMUNITY COMMERCIAL  
 HR = HIGH DENSITY RESIDENTIAL  
 LI = LIGHT INDUSTRIAL  
 LR = LOW DENSITY RESIDENTIAL  
 PD = PLANNED DEVELOPMENT

EXISTING ZONING (XX)  
 PROPOSED ZONING (XX)

# COPPER RANCH

## RANCHWOOD TRACT B SKETCH PLAN

**A PARCEL LOCATED IN THE NORTHEAST 1/4 OF SECTION 24, TOWNSHIP 1 NORTH,  
 RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN,  
 TOWN OF ERIE, COUNTY OF BOULDER, STATE OF COLORADO  
 28.650 ACRES - 4 LOTS - 0 TRACTS  
 SK-000806-2016**

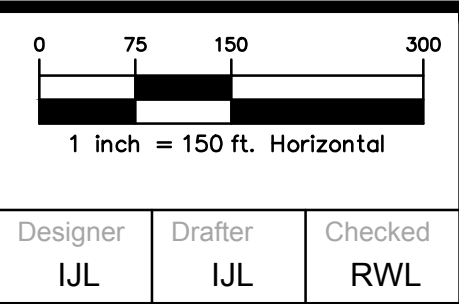


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 PLOTTED BY: KYLE HOFFMEISTER ROT DATE: 9/6/2016 1:34 PM  
 XREFS: 13TB\_10base\_VICINITY.MAP

DATE	REVISION	DESCRIPTION

Drawing Name	13SP2.dwg
Job Number	INLAND ERIE
Prepared For	INLAND

Designer	IJL
Drafter	IJL
Checked	RWL



**Calibre**  
 Calibre Engineering, Inc.  
 9090 South Ridgeline Boulevard, Suite 105  
 Highlands Ranch, CO 80129 (303) 730-0434  
 www.calibre-engineering.com  
 Construction Management Civil Engineering Surveying

**COPPER RANCH**  
**RANCHWOOD TRACT B SKETCH PLAN**  
**OVERALL SITE PLAN**

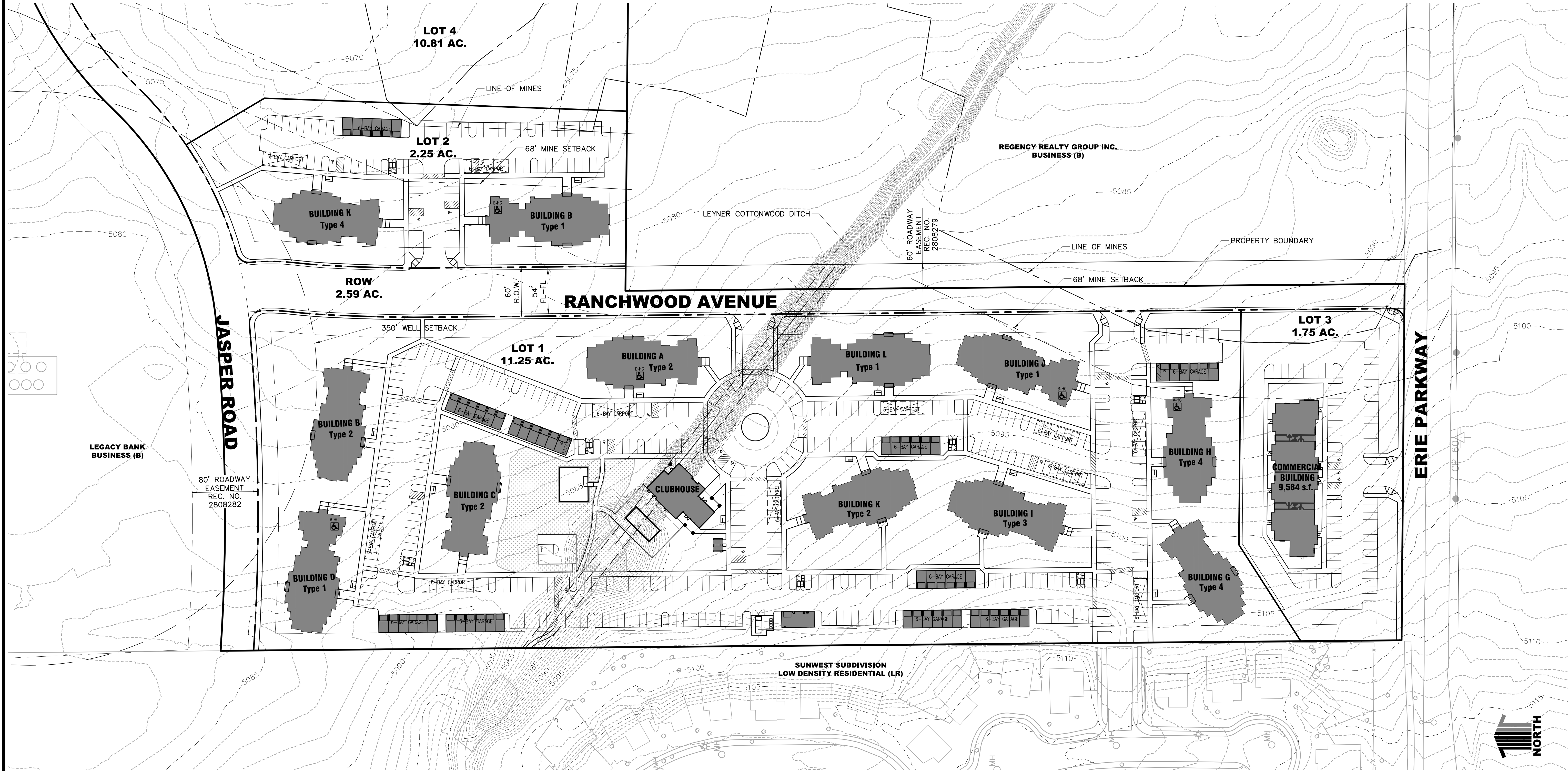
Sheet	2
	of
	7
Date	SEPTEMBER 6, 2016



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TOWN OF ERIE, COUNTY OF BOULDER, STATE OF COLORADO  
28.650 ACRES - 4 LOTS - 0 TRACTS  
SK-000806-2016



PATH: P:\INLAND\ERICADD\13 SKETCH PLAN\13SP1.DWG  
 PLOTTED BY: KYLE HOFFMEISTER DATE: 9/6/2016 1:36 PM  
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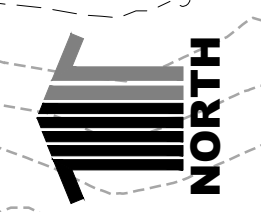
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Job Number INLAND ERIE
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Designer LMA	Drafter LMA	Checked RWL

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 Construction Management Civil Engineering Surveying

**COPPER RANCH**  
**RANCHWOOD TRACT B SKETCH PLAN**  
**DEVELOPMENT SITE PLAN**

Sheet  
**SP2**  
 3 of 7  
 Date  
 SEPTEMBER 6, 2016



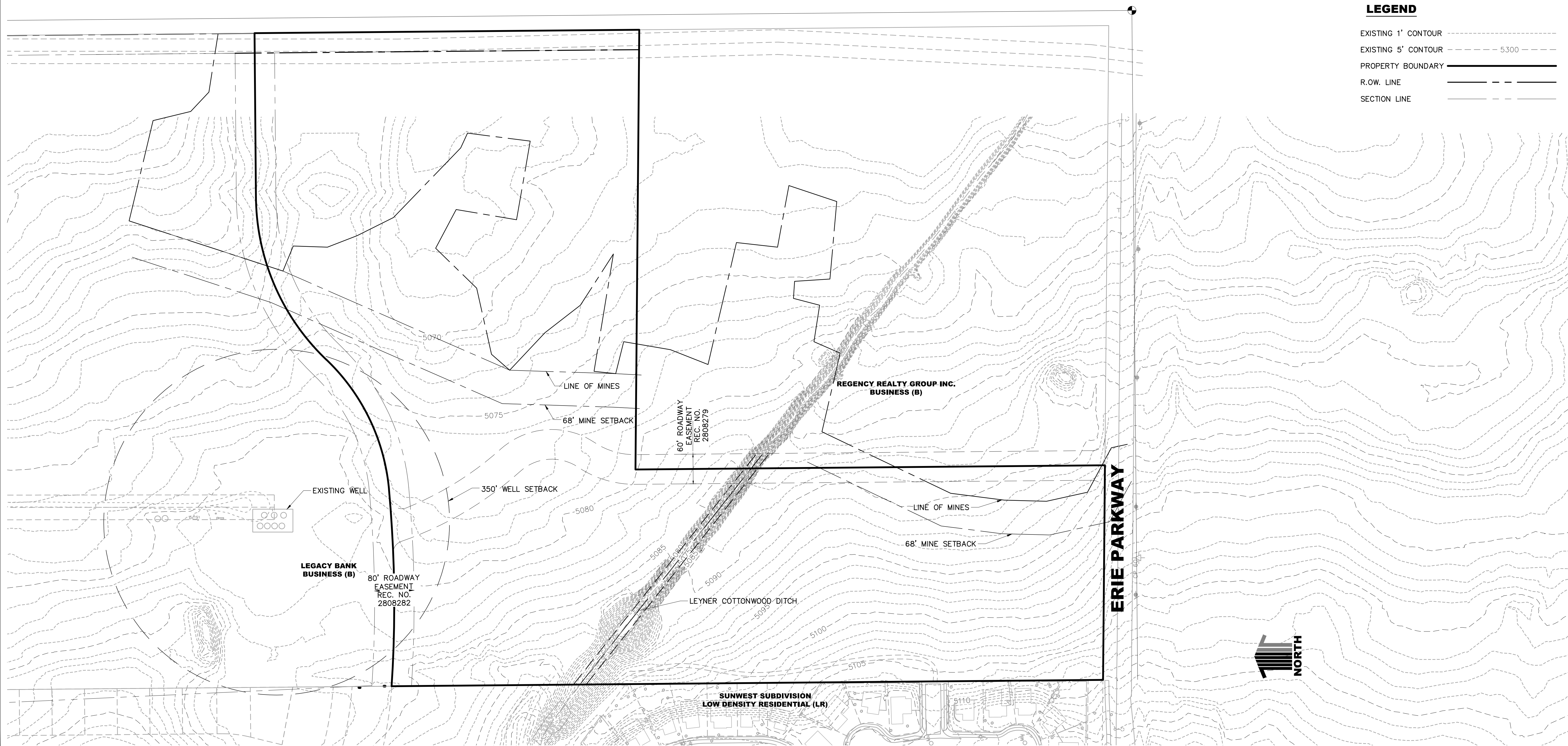
# COPPER RANCH

## RANCHWOOD TRACT B SKETCH PLAN

**A PARCEL LOCATED IN THE NORTHEAST 1/4 OF SECTION 24, TOWNSHIP 1 NORTH,  
RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN,  
TOWN OF ERIE, COUNTY OF BOULDER, STATE OF COLORADO  
28.650 ACRES - 4 LOTS - 0 TRACTS  
SK-000806-2016**

**LEGEND**

- EXISTING 1' CONTOUR -----
- EXISTING 5' CONTOUR ----- 5300
- PROPERTY BOUNDARY —————
- R.O.W. LINE - - - - -
- SECTION LINE - - - - -



PATH: P:\INLAND\ERIE\CADD\CIVIL\13 SKETCH PLAN\13EC1.DWG  
 PLOTTED BY: KYLE HOFFMEISTER DATE: 9/6/2016 1:36 PM  
 XREFS: 10base, 13TB

DATE	REVISION DESCRIPTION

Drawing Name 13EC1.dwg	Job Number INLAND ERIE
Prepared For INLAND	Designer LMA
	Drafter LMA
	Checked RWL

Scale: 1 inch = 100 ft. Horizontal

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## COPPER RANCH

### RANCHWOOD TRACT B SKETCH PLAN

### EXISTING CONDITIONS PLAN

Sheet <b>EC1</b>	4 of 7
Date SEPTEMBER 6, 2016	

# COPPER RANCH RANCHWOOD TRACT B SKETCH PLAN

A PARCEL LOCATED IN THE NORTHEAST 1/4 SECTION 24, TOWNSHIP 1 NORTH,  
RANGE 69 WEST OF THE 6TH PRINCIPLE MERIDIAN,  
TOWN OF ERIE, COUNTY OF BOULDER, STATE OF COLORADO  
28.650 ACRES - 4 LOTS - 0 TRACTS  
SK-000806-2016

## HR - ZONE SITE NOTES

SITE AREA: RESIDENTIAL = East Site 2.25 Acres (98,093 s.f.) West Site 11.25 Acres (490,080 s.f.)  
COMMERCIAL = 2.02 ACRES (88,068 S.F.)

### CONSTRUCTION TYPE/OCCUPANCY:

APARTMENTS: ..... V-B/R-2  
CLUB HOUSE: ..... V-B/A-3  
COMMERCIAL: ..... V-B

SETBACKS: FRONT: 25 FEET, 30 FEET AT LEON A WHUL PARKWAY, SIDES: 25 FEET, REAR: 20 FEET

### BUILDING SIZE:

18-UNIT BLDG.  
1ST FLOOR: ..... 7,487 S.F.  
2ND FLOOR: ..... 7,487 S.F.  
3RD FLOOR: ..... 7,487 S.F.  
TOTAL: ..... 22,461 S.F.

CLUBHOUSE: ..... 3,217 S.F.

### UNIT MIX:

	East Site	West Site	Total Site
1-BED 1-BATH	= 6 Units	36 Units	42 Units (19.5%)
2-BED 1-BATH	= 12 Units	30 Units	42 Units (19.5%)
2-BED 2-BATH	= 12 Units	72 Units	84 Units (39%)
3-BED	= 6 Units	42 Units	48 Units (22%)
<b>TOTAL</b>	<b>= 36 Units</b>	<b>180 Units</b>	<b>216 Units</b>

### NUMBER OF DWELLING UNITS:

East Site 36 (16 Units/Acre) West Site 180 Units 216 (16 Units/Acre) Total Site 216 Units

### PARKING REQUIRED:

East Site	West Site	Total Site
(6) 1-Bed x 1.5 = 9 spaces	(36) 1-Bed x 1.5 = 54 spaces	(42) 1-Bed x 1.5 = 63 spaces
(24) 2-Bed x 2 = 48 spaces	(102) 2-Bed x 2 = 204 spaces	(126) 2-Bed x 2 = 252 spaces
(6) 3-Bed Units x 2.0 = 12 spaces	(42) 3-Bed x 2 = 84 spaces	(48) 3-Bed x 2 = 96 spaces
Guest spaces 36/3 = 12 spaces	Guest spaces 180/3 = 60 spaces	Guest spaces 216/3 = 72 spaces
<b>Total</b>	<b>81 spaces</b>	<b>402 spaces</b>

### TOTAL PARKING PROPOSED:

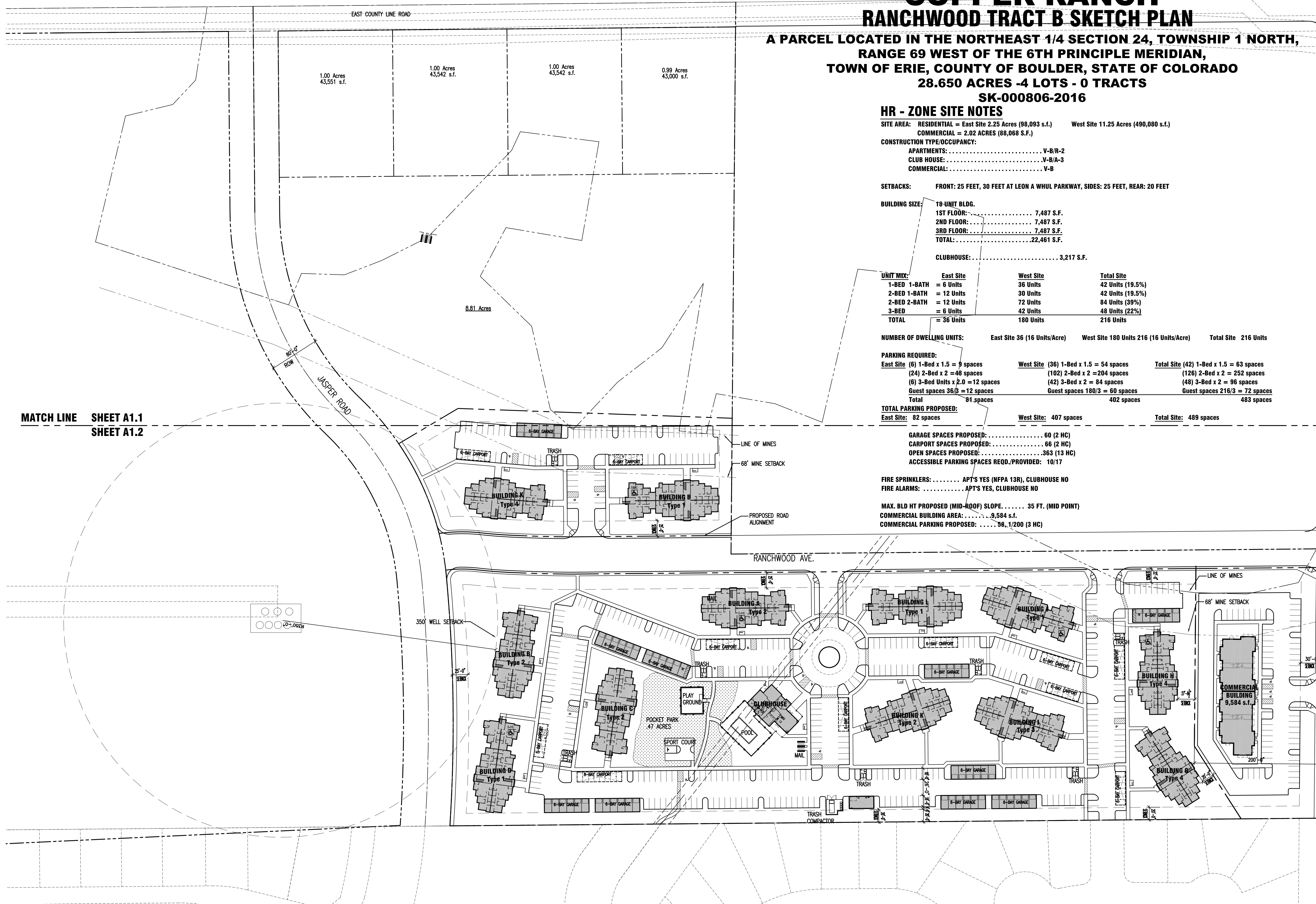
East Site: 82 spaces West Site: 407 spaces Total Site: 489 spaces

GARAGE SPACES PROPOSED: ..... 60 (2 HC)  
CARPORT SPACES PROPOSED: ..... 66 (2 HC)  
OPEN SPACES PROPOSED: ..... 363 (13 HC)  
ACCESSIBLE PARKING SPACES REQ./PROVIDED: 10/17

FIRE SPRINKLERS: ..... APT'S YES (NFPA 13R), CLUBHOUSE NO  
FIRE ALARMS: ..... APT'S YES, CLUBHOUSE NO

MAX. BLD HT PROPOSED (MID-ROOF) SLOPE: ..... 35 FT. (MID POINT)  
COMMERCIAL BUILDING AREA: ..... 9,584 s.f.  
COMMERCIAL PARKING PROPOSED: ..... 58, 1/200 (3 HC)

MATCH LINE SHEET A1.1  
SHEET A1.2



**1 OVERALL SITE PLAN**  
SCALE: 1" = 70'-0"



### PROJECT

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RANCHWOOD AVENUE  
ERIE, COLORADO

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### FILE

DATE: MAY 12, 2014

FILE NO: 13-222 A1.0

DRAWN BY: JOHN PRICE

### REVISIONS

### SHEET

**5**

5 of 7

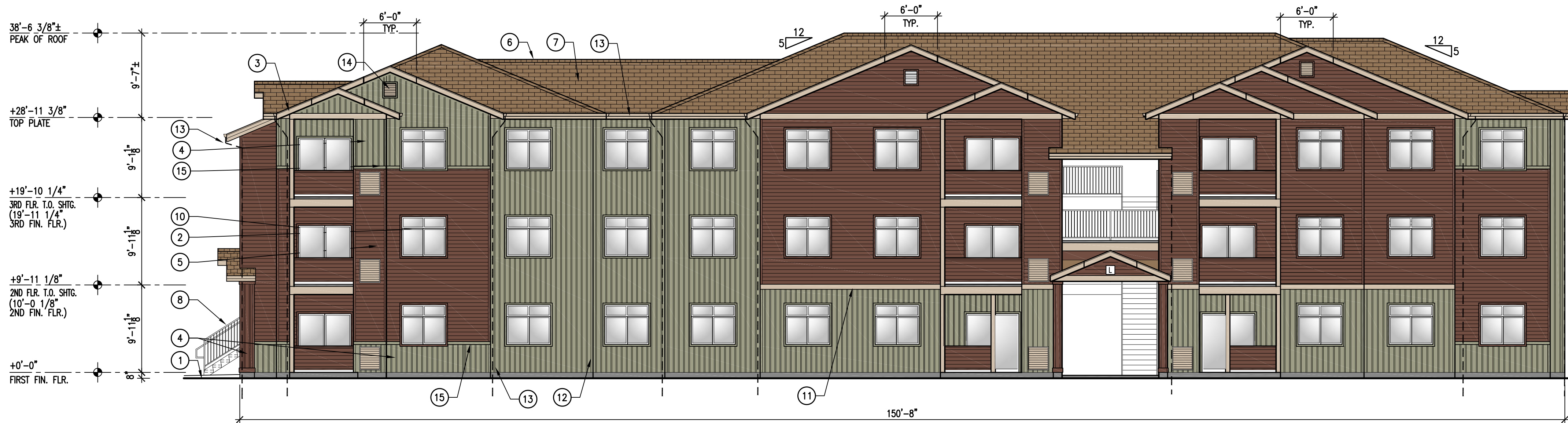
OVERALL SITE PLAN

# COPPER RANCH RANCHWOOD TRACT B SKETCH PLAN

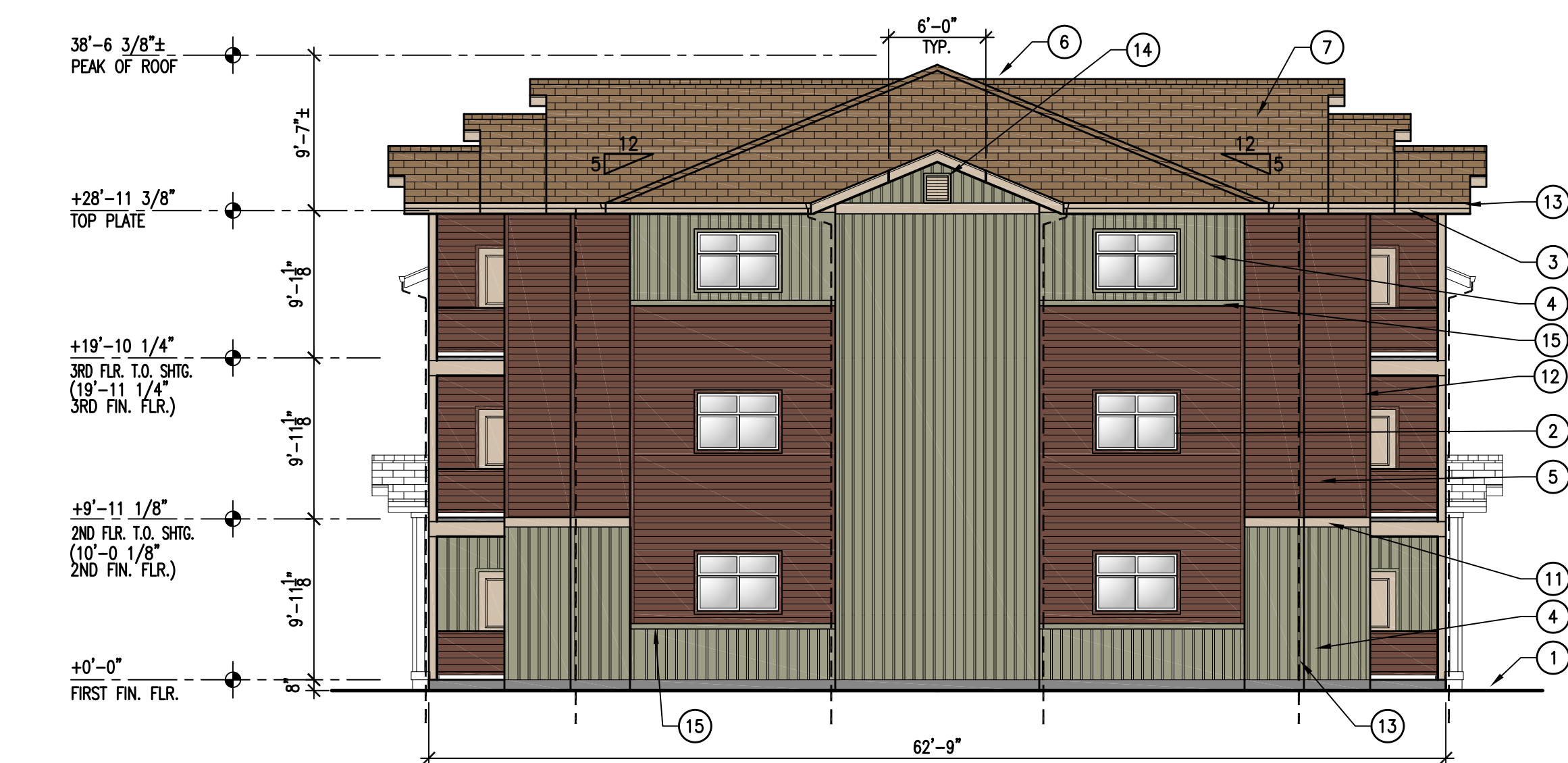
A PARCEL LOCATED IN THE NORTHEAST 1/4 SECTION 24, TOWNSHIP 1 NORTH,  
RANGE 69 WEST OF THE 6TH PRINCIPLE MERIDIAN,  
TOWN OF ERIE, COUNTY OF BOULDER, STATE OF COLORADO  
28.650 ACRES -4 LOTS - 0 TRACTS  
SK-000806-2016



**1 FRONT ELEVATION OPTION 1**  
SCALE: 1/8" = 1'-0"



**2 REAR ELEVATION OPTION 1**  
SCALE: 1/8" = 1'-0"



**3 LEFT ELEVATION OPTION 1**  
SCALE: 1/8" = 1'-0"



**4 RIGHT ELEVATION OPTION 1**  
SCALE: 1/8" = 1'-0"

## KEYNOTES

1. FINISH GRADE, SLOPE AWAY FROM BUILDING AT 2% MIN.
2. VINYL FRAME WINDOW PER SCHEDULE.
3. 2X8 PAINTED FASCIA SMART TRIM OR EQUAL.
4. BOARD AND BATTEN VINYL SIDING.
5. 4" CLAPBOARD STYLE LAPPED VINYL SIDING.
6. CONTINUOUS RIDGE VENT, SEE ROOF PLANS.
7. ARCHITECTURAL LAMINATED FIBERGLASS ROOF SHINGLES.
8. METAL RAILING.
9. AIR CONDITIONER GRILLE.
10. DOUBLE GLAZED, VINYL FRAMED, SLIDING GLASS DOOR.
11. PAINTED 7" TALL x 8/4 THICK BELLY BAND SMART TRIM OR EQUAL.
12. 3" VINYL CORNER TRIM.
13. PRE-FINISHED METAL GUTTER AND DOWNSPOUT, COORDINATE WITH CIVIL PLANS FOR CONTINUATION. ATTACHED TO BELLY BAND OR VINYL BLOCK ONLY.
14. 14" W X 16" H GABLE VENT.
15. PAINTED 3-1/2" TALL x 5/4 THICK BELLY BAND SMART TRIM OR EQUAL.
16. FRAME IN WALL BETWEEN LANDING AND ROOF BELOW. FINISH WITH 3" LAP SIDING EACH SIDE.
17. GAS METERS PER PLUMBING DRAWINGS.
18. 2x6 WALL CONSTRUCTION WITH SIDING IN THIS AREA TO PROVIDE A CHASE FOR GAS LINES TO UPPER FLOORS WHEN ADJACENT TO GAS METERS AS REQUIRED.
19. FIRE DEPARTMENT CONNECTION. PROVIDE SIGNAGE AS REQUIRED BY LOCAL FIRE DEPARTMENT.
20. MANUFACTURED STONE VENEER.
21. SHINGLE STYLE VINYL SIDING.

## GENERAL NOTES

- A. ALL NOTES ON ELEVATIONS ARE TYPICAL AND APPLY TO ALL ELEVATIONS.
- B. ALL FINISH MATERIALS TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS, 2012 IBC REQUIREMENTS AND PER GENERALLY ACCEPTED CONSTRUCTION PRACTICES.
- C. VERIFY ALL FINISH MATERIAL SELECTION AND COLORS WITH OWNER PRIOR TO ORDERING AND INSTALLATION.
- D. SUB-CONTRACTORS TO PROVIDE 12" X 12" MIN. SAMPLE OF ALL FINISH MATERIALS FOR OWNER'S REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.
- E. ALL UTILITIES TO BE SCREENED OR BELOW GRADE. COORDINATE WITH MECHANICAL DRAWINGS AS REQUIRED.

## LEGEND

- WALL MOUNT LIGHT FIXTURE, SHOWN SCHEMATIC ONLY. SEE ELECTRICAL DRAWINGS.

PROJECT

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JOHN PRICE

REVISIONS

SHEET

**6**

6 of 7

BUILDING TYPE 1  
EXTERIOR ELEVATIONS

# COPPER RANCH RANCHWOOD TRACK B SKETCH PLAN

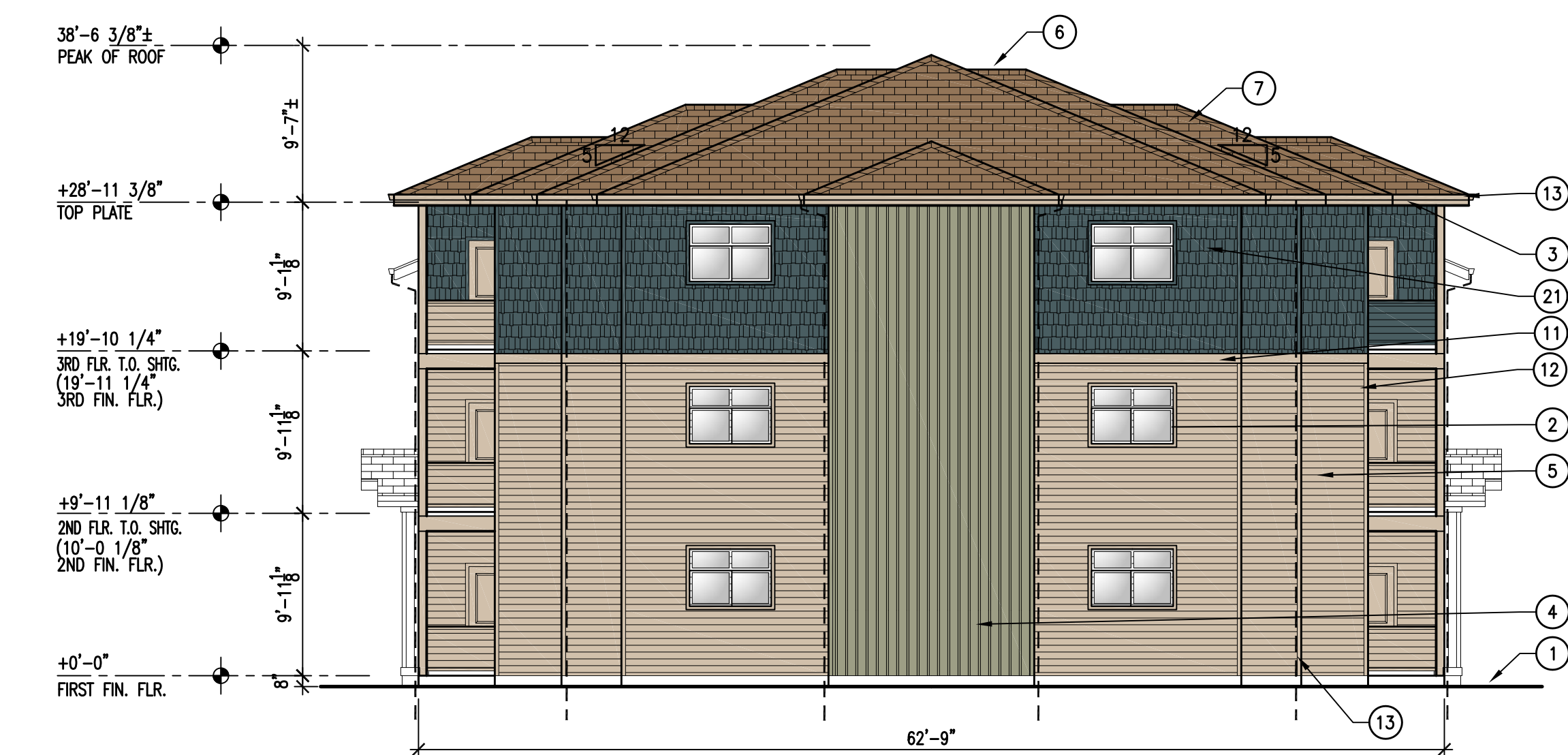
A PARCEL LOCATED IN THE NORTHEAST 1/4 SECTION 24, TOWNSHIP 1 NORTH,  
RANGE 69 WEST OF THE 6TH PRINCIPLE MERIDIAN,  
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28.650 ACRES -4 LOTS - 0 TRACTS  
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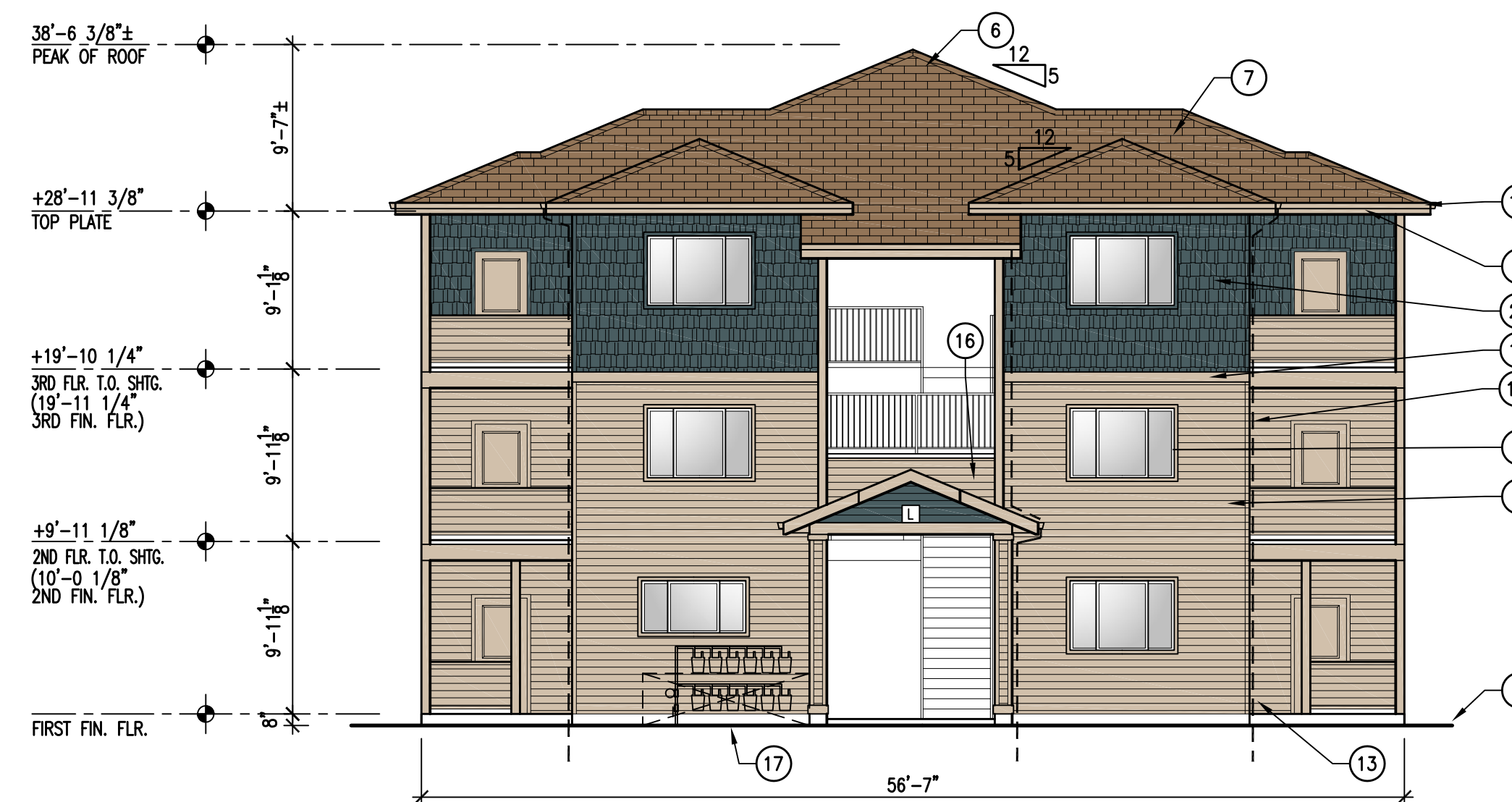
**1 FRONT ELEVATION OPTION 2**  
SCALE: 1/8" = 1'-0"



**2 REAR ELEVATION OPTION 2**  
SCALE: 1/8" = 1'-0"



**3 LEFT ELEVATION OPTION 2**  
SCALE: 1/8" = 1'-0"



**4 RIGHT ELEVATION OPTION 2**  
SCALE: 1/8" = 1'-0"

## KEYNOTES

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2. VINYL FRAME WINDOW PER SCHEDULE.
3. 2X8 PAINTED FASCIA SMART TRIM OR EQUAL.
4. BOARD AND BATTEN VINYL SIDING.
5. 4" CLAPBOARD STYLE LAPPED VINYL SIDING.
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20. MANUFACTURED STONE VENEER.
21. SHINGLE STYLE VINYL SIDING.

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- E. ALL UTILITIES TO BE SCREENED OR BELOW GRADE. COORDINATE WITH MECHANICAL DRAWINGS AS REQUIRED.

## LEGEND

-  WALL MOUNT LIGHT FIXTURE, SHOWN SCHEMATIC ONLY. SEE ELECTRICAL DRAWINGS.

PROJECT

**COPPER AT  
ERIE  
COLORADO**

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REVISIONS

SHEET

**7**

7 of 7

BUILDING TYPE 1  
EXTERIOR ELEVATIONS



COPPER RANCH  
PHASE I DRAINAGE REPORT

JULY 2016

**For:**  
**Inland Group**  
**120 West Cataldo Avenue, Suite 100**  
**Spokane Valley, WA 99201**



## COPPER RANCH

### PHASE I DRAINAGE REPORT

Page i of ii

#### ENGINEER'S STATEMENT:

I hereby state that this Phase I Drainage Report for Copper Ranch was prepared by me (or under my direct supervision) in general accordance with the *Town of Erie Standards and Specifications* and the *Urban Storm Drainage Criteria Manual*.

---

Todd A. Johnson, P.E. Date

State of Colorado No. 37660

For and on behalf of Calibre Engineering, Inc.

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- A. Maps and Exhibits
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## SCOPE

The purpose of this report is to review at a conceptual level the feasibility and design characteristics of the proposed Copper ranch development and drainage system.

### I. INTRODUCTION

#### A. Location

- The Copper Ranch site is north of Erie Parkway, and west of East County Line Road.
- The site is located in the Northeast quarter of Section 24, Township 1 North, Range 69 West of the 6<sup>th</sup> Principal Meridian, Town of Erie, County of Boulder, State of Colorado.
- The Leyner-Cottonwood Ditch runs through the site into existing 42"-60" RCP storm drainage conveyance under Erie Parkway and County Line road and eventually east to Coal Creek.
- The site bound on the west by the Sunwest Subdivision, the south by Erie Parkway and on the north and east by undeveloped land.

#### B. Description of Property

- Copper Ranch is approximately 16.54 acres in size.
- The site is currently undeveloped land with native grasses. According to the *Natural Resources Conservation Service Web Soil Survey* for the County of Boulder, the site dominantly Hydrologic Soil Group B as Ascalon Sandy Loam and some Manter Sandy Loam, and some Group C soils as Hargreave fine sandy loam.
- The Leyner-Cottonwood Ditch runs through the site from northwest to southeast, and is lined with shrubs and native grasses.
- The site slopes to the northeast at approximately 3-4%.
- The development will consist of 240 multifamily units.
- There are no delineated wetlands onsite.

### II. DRAINAGE BASINS

#### A. Major Basin Description

- The proposed site is located within the limits of the *Town of Erie Outfall Systems Plan (West of Coal Creek) Alternatives Analysis Report (OSP)*. Copper Ranch is within the OSP major Basin 461 and 469. The OSP indicates that Basin 461 will drain to detention facility 1048 and Basin 469 will drain to detention facility 1046. Copies of the applicable pages from the OSP are included in Appendix B.
- A FEMA Flood Insurance Rate Map (FIRM) is in Appendix A. The site is shown on Community Panel No 0801810016E. No mapped 100 year flood plains are shown for the site.

- The site is within the Coal Creek watershed and drains east to Coal Creek.
- There are currently no detention facilities on the site.
- There are no lakes or ponds which either influence or may be influenced by the local drainage. There are no dams under the State Engineer's Office jurisdiction on site.

#### B. Sub-Basin Description

- Detention facilities will need to be constructed on the site to attenuate outflow from the site during the 100 year flood event.
- Currently, a portion of the site drains the Leyner-Cottonwood ditch, a portion drains off-site to the east and the portion north of the Ditch drains northeast off-site. There are some areas of the adjacent properties that were considered for off-site storm drainage onto the project.
- The increase in storm runoff due to the proposed development will be detained in two separate detention ponds, and released per Town of Erie criteria. The proposed development will not increase historic runoff and therefore downstream properties should not be adversely affected by the development of the proposed site.

### III. DRAINAGE FACILITY DESIGN

#### A. General Concept

- The onsite drainage will be, in general, captured by proposed curb and gutter and storm sewer. The minor storm event will be conveyed by inlets and storm pipes. The major storm event will be conveyed by streets and result in a pressurized storm sewer system.
- The proposed drainage patterns will follow existing drainage patterns as closely as possible. Runoff will flow from the southwest to the northeast, either by the streets or the proposed storm sewer system.
- All storm runoff will flow to one of two proposed onsite full-spectrum detention facilities. If Regional Ponds 1046 or 1048 come online before the construction of the Copper ranch site, the onsite full-spectrum detention facilities may be unnecessary.

#### B. Drainage Design Criteria

- Criteria used in the development of this Phase I Drainage Report include:
  - The Town of Erie Standards and Specifications Storm Criteria.
  - The Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual was also used as a reference and guide for criteria.
  - Town of Erie Outfall Systems Plan (West of Coal Creek) Outfall Systems Plan prepared by Respec Consulting & Services, Inc., January 2014.
- Hydrologic criteria to be used in the development calculations include:
  - The Rational Method will be used for all hydrologic calculations.

- The minor event is the 2-year storm with a one-hour design rainfall depth of 1.01 inches per hour.
- The major event is the 100-year storm with a one-hour design rainfall depth of 2.70 inches per hour.
- Per the *Town of Erie Standards and Specifications Storm Criteria*, Table 800-3 will be used to determine appropriate runoff coefficients.
- Hydraulic Criteria to be used in the development calculations include:
  - Per *Town of Erie Standards and Specifications Storm Criteria*, Tables 800-7 and 800-8, allowable flow depths within the streets are:
    - To the top of curb flow may spread to crown of street for the minor event.
    - Residential dwellings should be no less than 12 inches above the 100-year flood at the ground line or lowest water entry of the building. The depth of water over the gutter flow line will not exceed 18 inches for the major storm.
  - Urban Drainage Spreadsheets for inlet and detention pond design will be used to size inlets, calculate street capacity and design the detention facilities.

### C. Specific Details

- The proposed development will be comprised of drainage basins that are divided by the Leyner-Cottonwood Ditch.
  - The north basins are comprised of access roadways, multifamily units, and sub-basins that flow toward a proposed detention pond located near the northeast corner of the site.
  - The south basin is comprised of a portion of the Leyner-Cottonwood Ditch, an access roadway, multifamily units, and sub-basins that flow toward a proposed detention pond located on the eastern side of the basin. The south basin detention pond will outfall, east, into the re-aligned Leyner-Cottonwood Ditch at historic rates.
- The proposed site improvements include constructed roadways that will become a part of the Town of Erie network. The storm drainage from this site will be detained in proposed full-spectrum detention ponds and be released per Town of Erie criteria
- The Leyner-Cottonwood Ditch may be diverted through the property re-connecting with the existing ditch alignment off-site. The re-aligned ditch may be open channel or contained within a pipe network. The network will be reviewed and approved by the Town of Erie and the Leyner-Cottonwood Ditch Company.

### D. Adaptions of Criteria

- No deviation from criteria is requested for this drainage design at this time.

## IV. SUMMARY

### A. Compliance with Standards

- This drainage report is in general compliance with the Town of Erie, Standards and Specifications for Design and Construction of Public Improvements.
- The Urban Drainage and Flood Control District's *Urban Storm Drainage Criteria Manual* was also used as a reference and guide for criteria.

### B. Summary of Concept

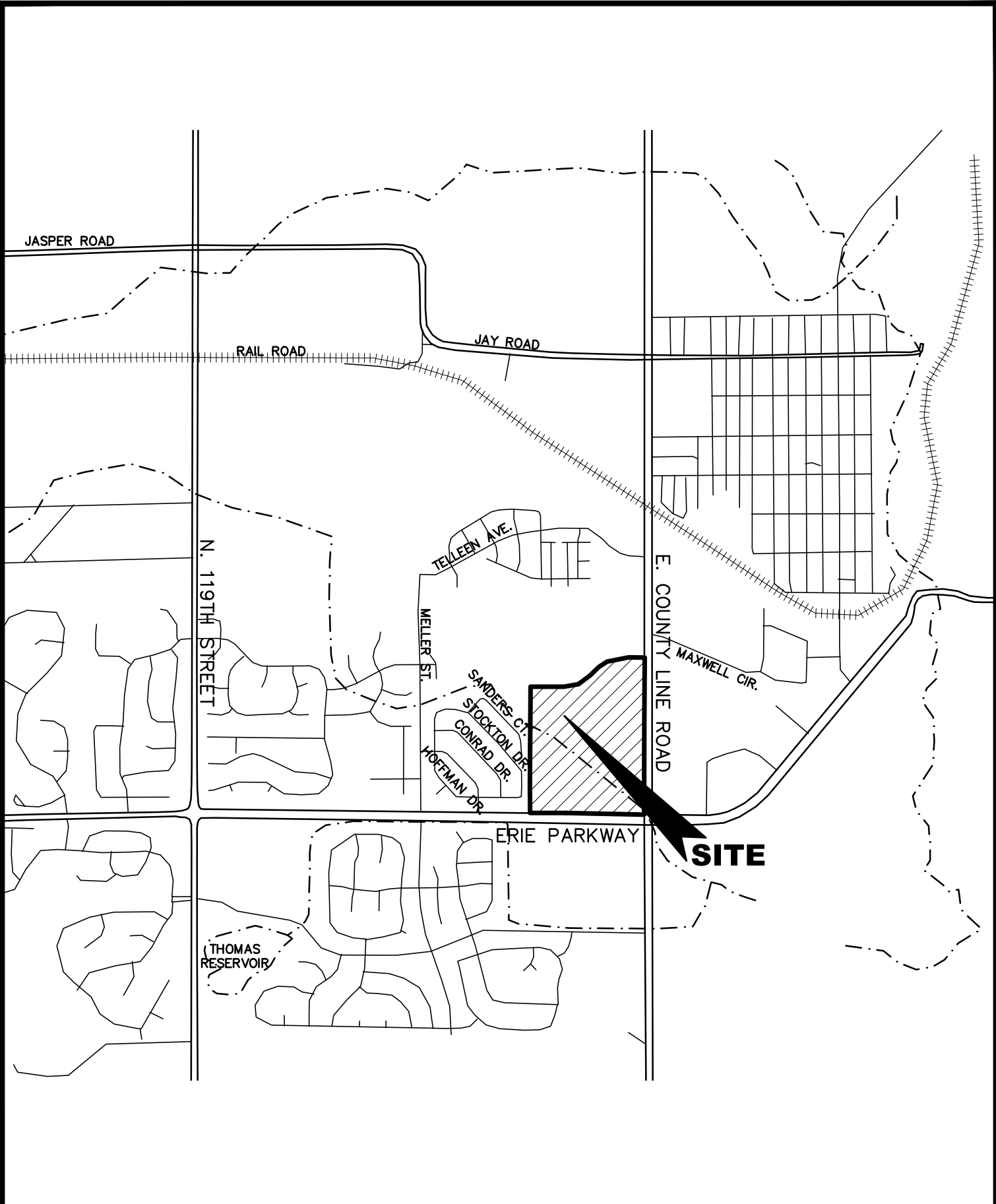
- Onsite flow will be conveyed in storm sewer systems designed for the minor storm event.
- Two separate proposed onsite full-spectrum detention facilities will provide adequate on-site drainage and enhancement to stormwater quality.
- If proposed Regional Ponds 1046 and 1048 come online before the construction of the Copper ranch site, the onsite full-spectrum detention facilities may be unnecessary.
- The proposed development will not increase historic runoff, therefore downstream properties should not be adversely affected by the development of the proposed site.

## V. LIST OF REFERENCES

1. The Town of Erie, *Standards and Specifications for Design and Construction of Public Improvements, Section 800, Storm Drainage Facilities*, 2012 Edition.
2. *Urban Storm Drainage Criteria Manuals*, Urban Drainage Flood Control District, Jan 2007.
3. *Town of Erie Outfall Systems Plan (West of Coal Creek)*, prepared by Respec Consulting & Services, January 2014.
4. *Flood Insurance Rate Map*, Map Number 0801810016E, Effective Date December 2, 2004, Federal Emergency Management Agency.
5. Hydrologic Group Rating for Adams County, CO, USDA Natural Resources Conservation Service.

APPENDIX A.  
MAPS AND EXHIBITS





P:\INLAND\_ERIE\CADD\EXHIBITS\X-Vicinity.dwg

**Calibre**

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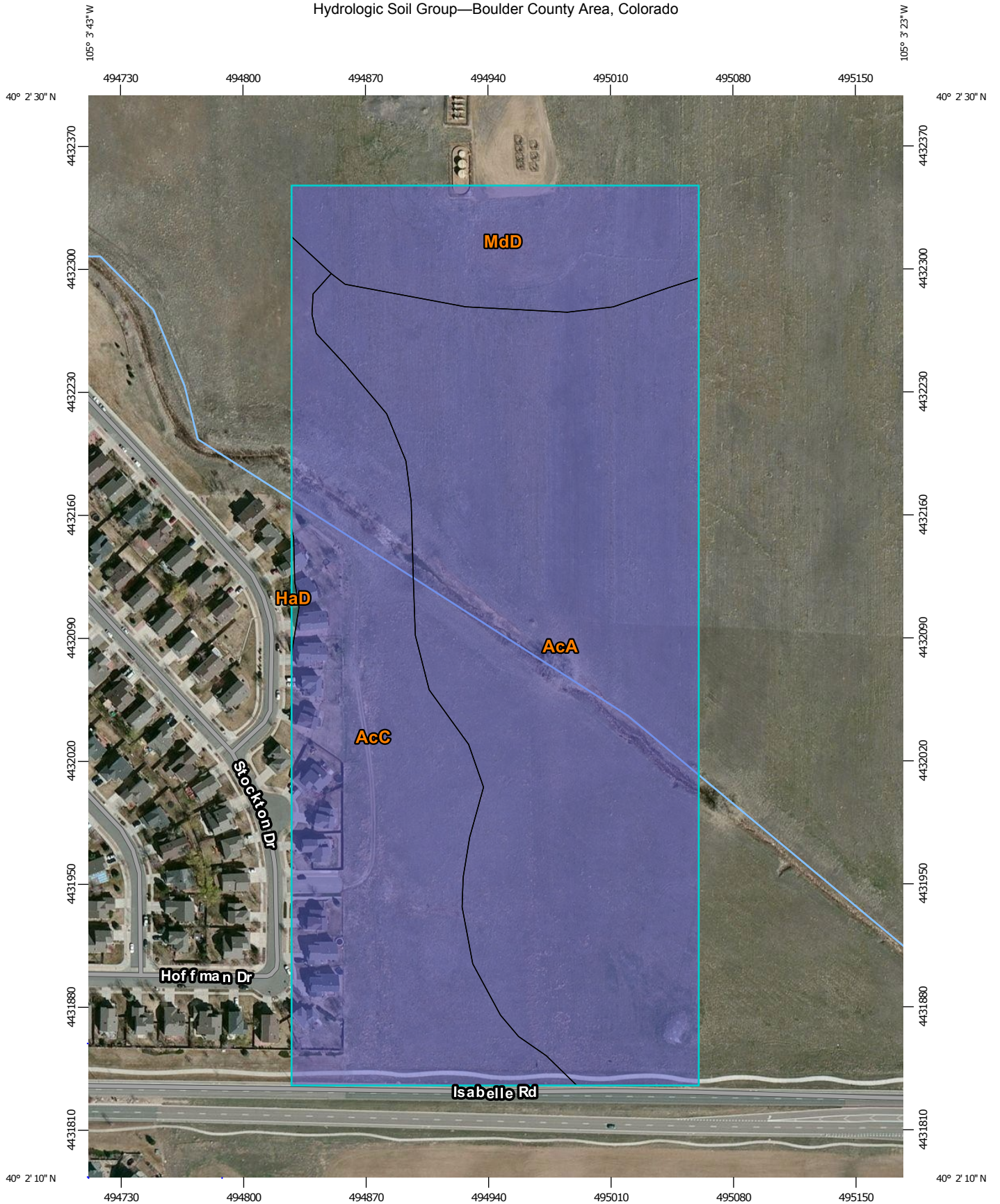
**COPPER AT ERIE  
 PHASE I DRAINAGE  
 VICINITY MAP**

SHEET  
**VM1**

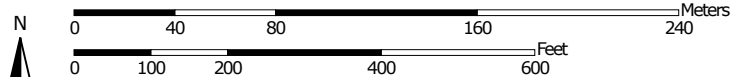
SCALE: 1"=1,500'

DATE:  
 JULY 2016

Hydrologic Soil Group—Boulder County Area, Colorado



Map Scale: 1:3,000 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84



## MAP LEGEND

### Area of Interest (AOI)









 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons





 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Lines

 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Points






 A  
 A/D  
 B  
 B/D

 C  
 C/D  
 D  
 Not rated or not available


#### Water Features

 Streams and Canals

#### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

#### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Boulder County Area, Colorado  
 Survey Area Data: Version 10, Dec 30, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 22, 2011—Apr 13, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Boulder County Area, Colorado (CO643)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AcA	MLRA 67B - Ascalon sandy loam, 0 to 3 percent slopes	B	16.7	56.3%
AcC	Ascalon sandy loam, 3 to 5 percent slopes	B	9.3	31.4%
HaD	Hargreave fine sandy loam, 3 to 9 percent slopes	C	0.0	0.1%
MdD	Manter sandy loam, 3 to 9 percent slopes	B	3.6	12.2%
<b>Totals for Area of Interest</b>			<b>29.6</b>	<b>100.0%</b>

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

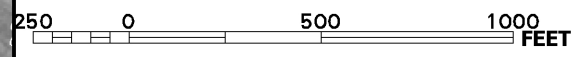
*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

Insurance is available in this community, contact your local Flood Insurance Program at (800) 638-6620.



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0016E

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
TOWN OF  
ERIE,  
COLORADO  
BOULDER AND WELD COUNTIES  
**PANEL 16 OF 50**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ERIE, TOWN OF	080181	0016	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



**MAP NUMBER**  
**0801810016E**  
**MAP REVISED:**  
**DECEMBER 2, 2004**

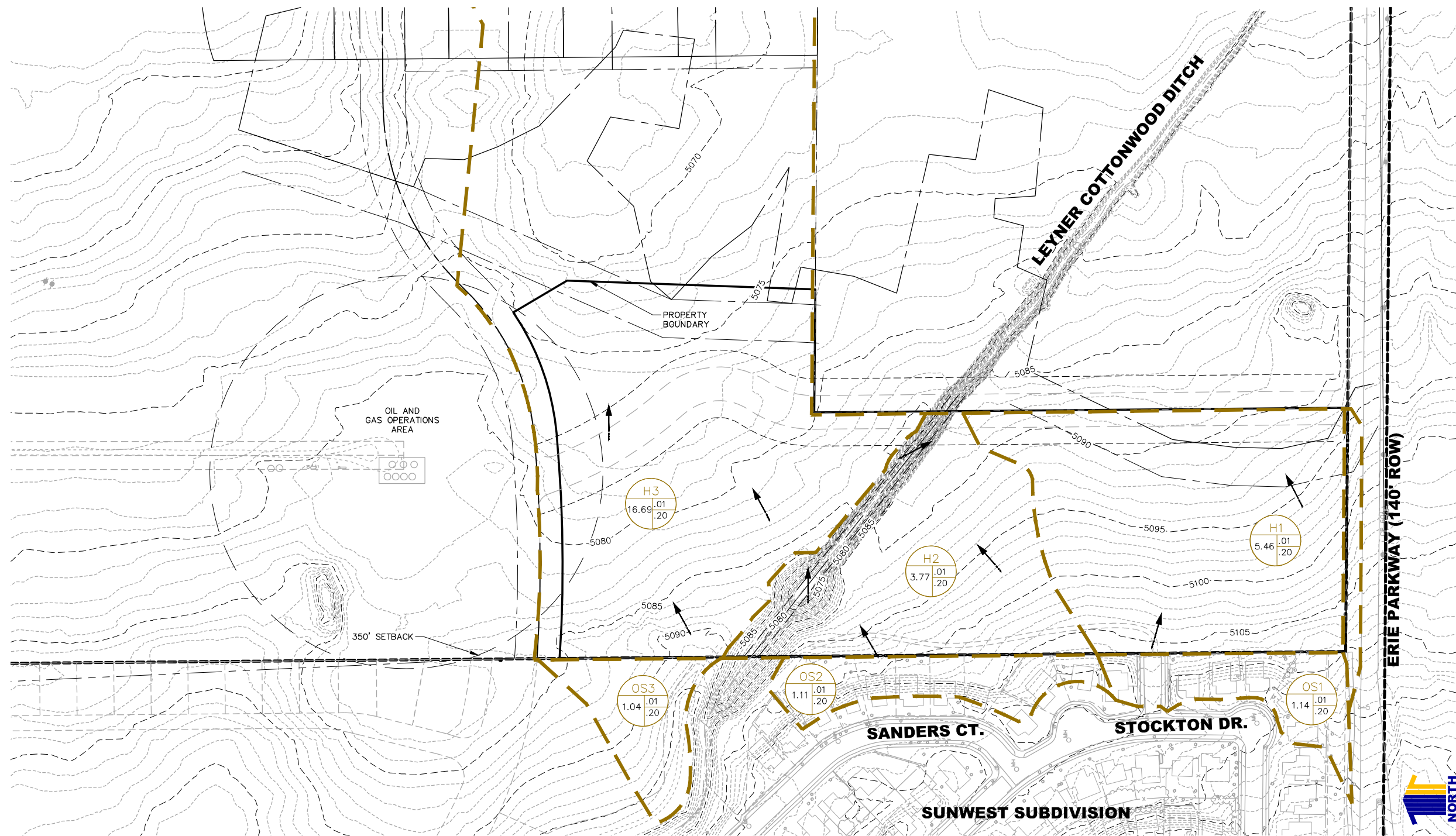
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

**LEGEND**

- PROPOSED MAJOR CONTOUR (5') — 5250 —
- PROPOSED MINOR CONTOUR (1') — — — — —
- EXISTING MINOR CONTOUR (1') - - - - -
- EXISTING MAJOR CONTOUR (5') - - - 5250 - - -
- PROPOSED STORM DRAIN PIPE — — — — —
- PROPOSED STORM DRAIN INLET
- PROPOSED RIPRAP PAD
- PROPOSED SWALE - - - - -
- PROPERTY LINE — — — — —
- DIRECTIONAL FLOW ARROW ← — — — —
- BASIN LINE - - - - -
- 100-YR WSEL - - - - -
- DESIGN POINT ▲
- EXISTING BASIN LABEL ▲

A1	BASIN DESIGNATION
1.00	MINOR RUNOFF COEF.
.40	MAJOR RUNOFF COEF.



PATH: P:\INLAND\ERIE\CADD\EXHIBITS\X-EDR.DWG  
 PLOTTED BY: Megan Sawyer PLOT DATE: 7/6/2016 12:09 PM  
 XREFS: 10base

DATE	REVISION	DESCRIPTION
▲		
▲		
▲		
▲		

Drawing Name <b>X-EDR.dwg</b>				
Job Number				
Prepared For <b>INLAND CONSTRUCTION</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Designer <b>KLH</b></td> <td style="width: 33%;">Drafter <b>MAS</b></td> <td style="width: 33%;">Checked <b>TAJ</b></td> </tr> </table>	Designer <b>KLH</b>	Drafter <b>MAS</b>	Checked <b>TAJ</b>
Designer <b>KLH</b>	Drafter <b>MAS</b>	Checked <b>TAJ</b>		



Calibre

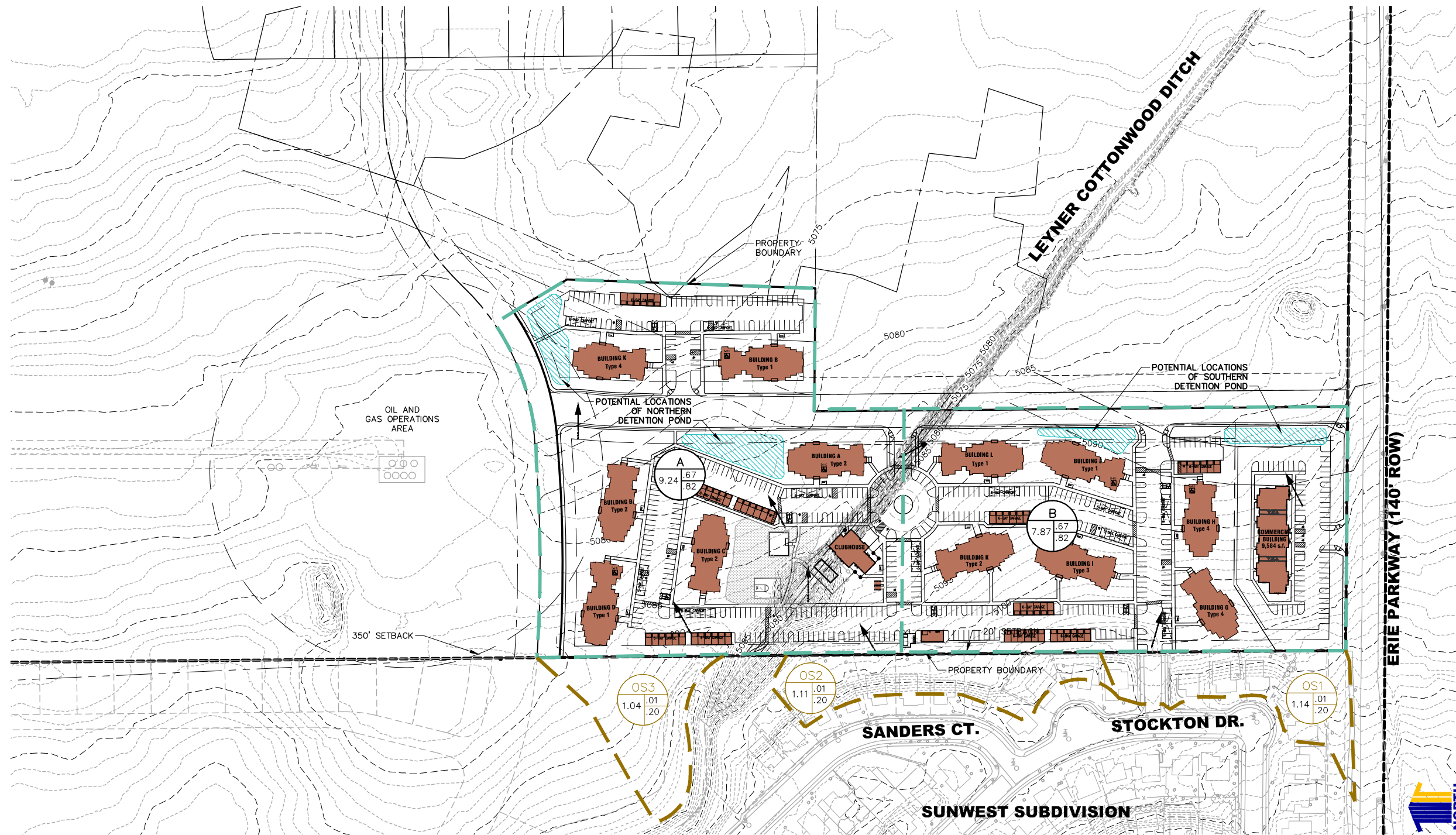
Calibre Engineering, Inc.  
 9090 South Ridgeline Boulevard, Suite 105  
 Highlands Ranch, CO 80129 (303) 730-0434  
 www.calibre-engineering.com  
 Construction Management Civil Engineering Surveying

**COPPER AT ERIE**  
**PHASE I DRAINAGE REPORT**  
**EXISTING DRAINAGE EXHIBIT**

Sheet	1
DR1	2
Date	JULY 2016

**LEGEND**

- PROPOSED MAJOR CONTOUR (5') — 5250 —
  - PROPOSED MINOR CONTOUR (1') —
  - EXISTING MINOR CONTOUR (1') - - -
  - EXISTING MAJOR CONTOUR (5') - - - 5250 - - -
  - PROPOSED STORM DRAIN PIPE —
  - PROPOSED STORM DRAIN INLET
  - PROPOSED RIPRAP PAD
  - PROPOSED SWALE - - - - -
  - PROPERTY LINE —
  - DIRECTIONAL FLOW ARROW ←
  - EXISTING BASIN LINE - - -
  - PROPOSED BASIN LINE - - -
  - 100-YR WSEL - - -
  - DESIGN POINT
  - PROPOSED BASIN LABEL
- 
- A1 BASIN DESIGNATION
  - AREA (AC.) 1.00 .40 MINOR RUNOFF COEF.
  - .60 MAJOR RUNOFF COEF.
- 
- EXISTING BASIN LABEL EX BASIN DESIGNATION
  - AREA (AC.) 1.00 .40 MINOR RUNOFF COEF.
  - .60 MAJOR RUNOFF COEF.



PATH: P:\INLAND\ERIE\CADD\EXHIBITS\X-PDR.DWG  
 PLOTTED BY: Megan Sawyer PLOT DATE: 7/6/2016 4:16 PM  
 XREFS: 13-222 x-Unit B-2, 13-222 x-Unit C-1, 10PPN, 10base.

DATE	REVISION	DESCRIPTION

Drawing Name <b>X-PDR.dwg</b>	 1 inch = 100 ft. Horizontal 1 inch = 0 ft Vertical			
Job Number				
Prepared For <b>INLAND CONSTRUCTION</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Designer <b>KLH</b></td> <td style="width: 33%;">Drafter <b>MAS</b></td> <td style="width: 33%;">Checked <b>TAJ</b></td> </tr> </table>	Designer <b>KLH</b>	Drafter <b>MAS</b>	Checked <b>TAJ</b>
Designer <b>KLH</b>	Drafter <b>MAS</b>	Checked <b>TAJ</b>		

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**COPPER AT ERIE**  
**PHASE I DRAINAGE REPORT**  
**PROPOSED DRAINAGE EXHIBIT**

Sheet	2
DR2	of 2
Date	JULY 2016



APPENDIX B.  
COPIES OF GRAPHS, TABLES AND REFERENCES



# TOWN OF ERIE

## OUTFALL SYSTEMS PLAN (WEST OF COAL CREEK)

JANUARY 2014

PREPARED FOR: URBAN DRAINAGE & FLOOD CONTROL DISTRICT  
TOWN OF ERIE  
BOULDER COUNTY  
CITY OF LAFAYETTE



PREPARED BY: RESPEC CONSULTING AND SERVICES  
720 SOUTH COLORADO BLVD, SUITE 410S  
DENVER, CO 80246



# LEGEND

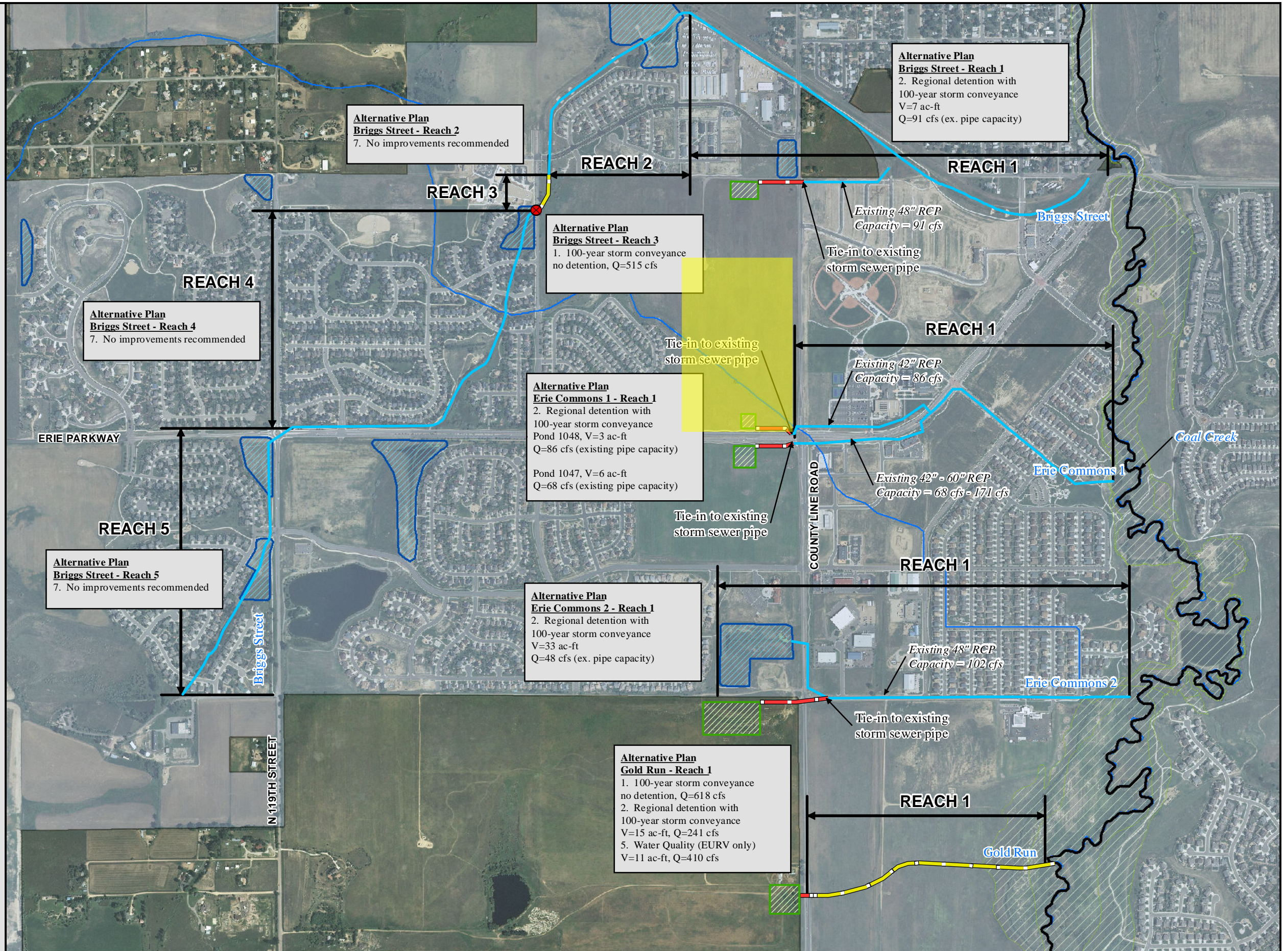
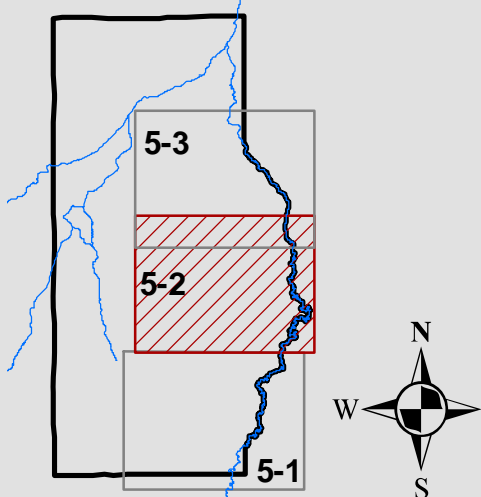
- Study Area Boundary
- Erie Planning Area Boundary
- Town of Erie
- City of Lafayette
- 100-Year Floodplain (FIS)
- Existing Detention Ponds
- Outfall Alignment  
(Outfall Name)

Note: 100-Year floodplain information from Boulder County Flood Insurance Study (FIS), FEMA, December 18, 2012

# ALTERNATIVES







- Storm Sewer
- Channel
- Regional Detention
- Culvert/Bridge Improvements
- Bank Stabilization
- Property Acquisition

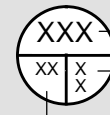
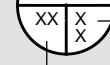
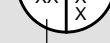

# KEY MAP



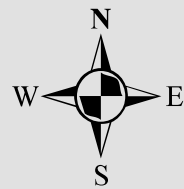
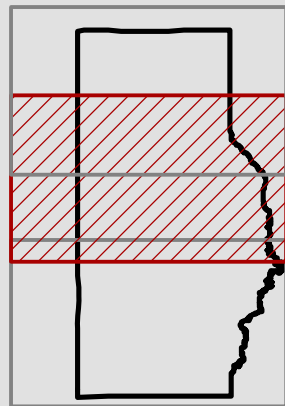
M:\2234\C\IS\2234-ALTERNATIVES.MXD - 3/1/13 - NRT

# LEGEND

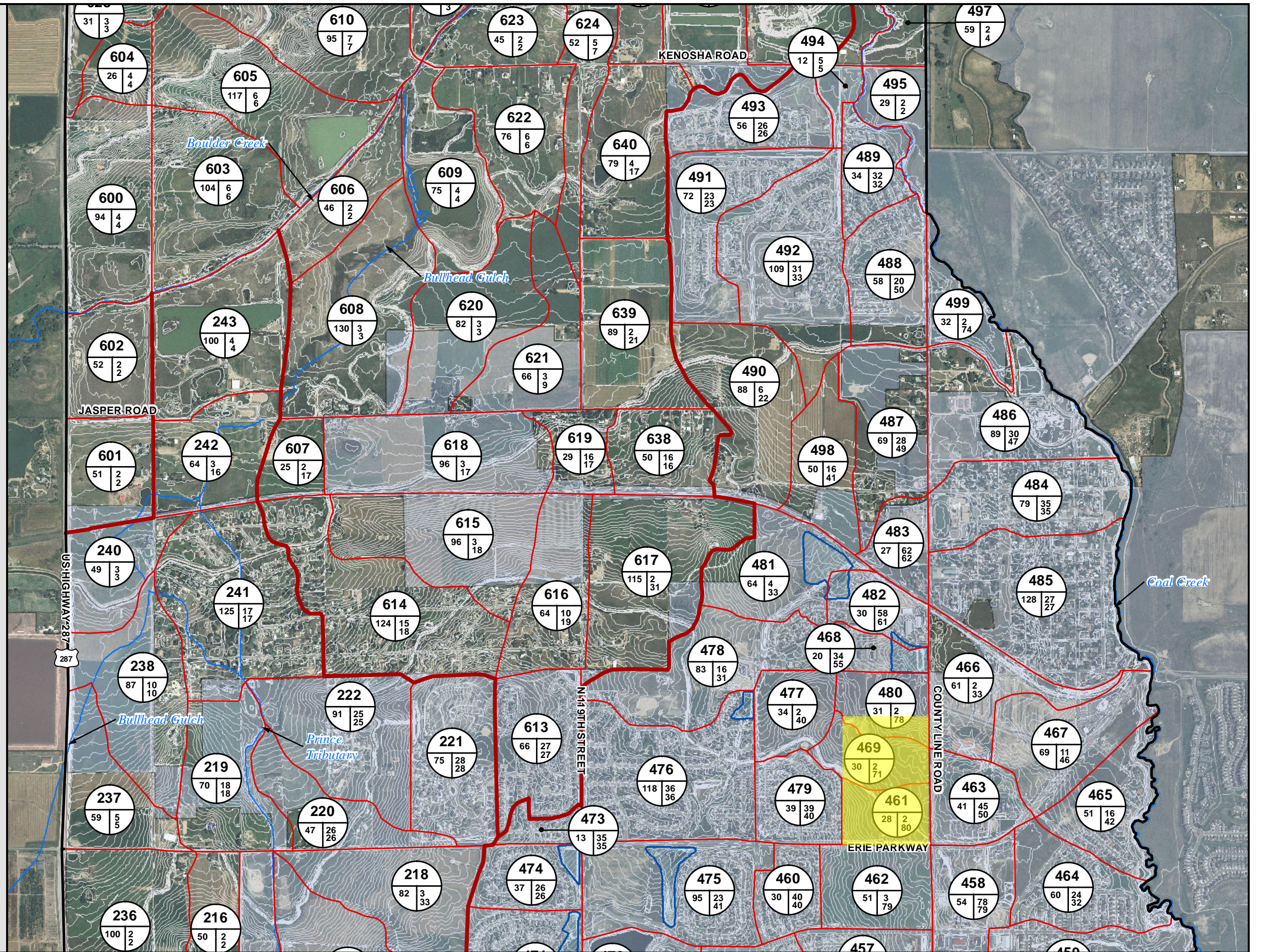
-  Study Area Boundary
-  Town of Erie
-  City of Lafayette
-  Subbasin Boundary
-  Major Watershed Boundary
-  Regional Detention Ponds

-  Subbasin ID  
 % Impervious (Existing Land Use)  
 % Impervious (Future Land Use)  
 Area (Acres)

## KEY MAP









0 750 1,500 3,000 Feet  
1" = 1,500 FT








M:\2234\GIS\2234\_MXD - 12/12/12 - NRT

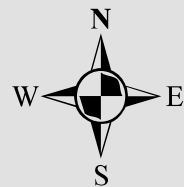
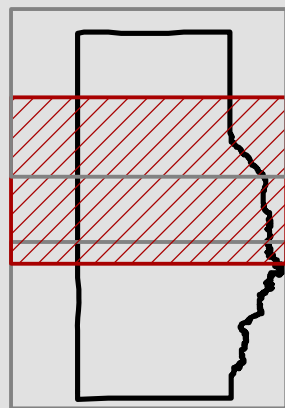
# LEGEND

-  Study Area Boundary
-  Town of Erie
-  City of Lafayette
-  Subbasin Boundary
-  Major Watershed Boundary
-  Regional Detention Ponds

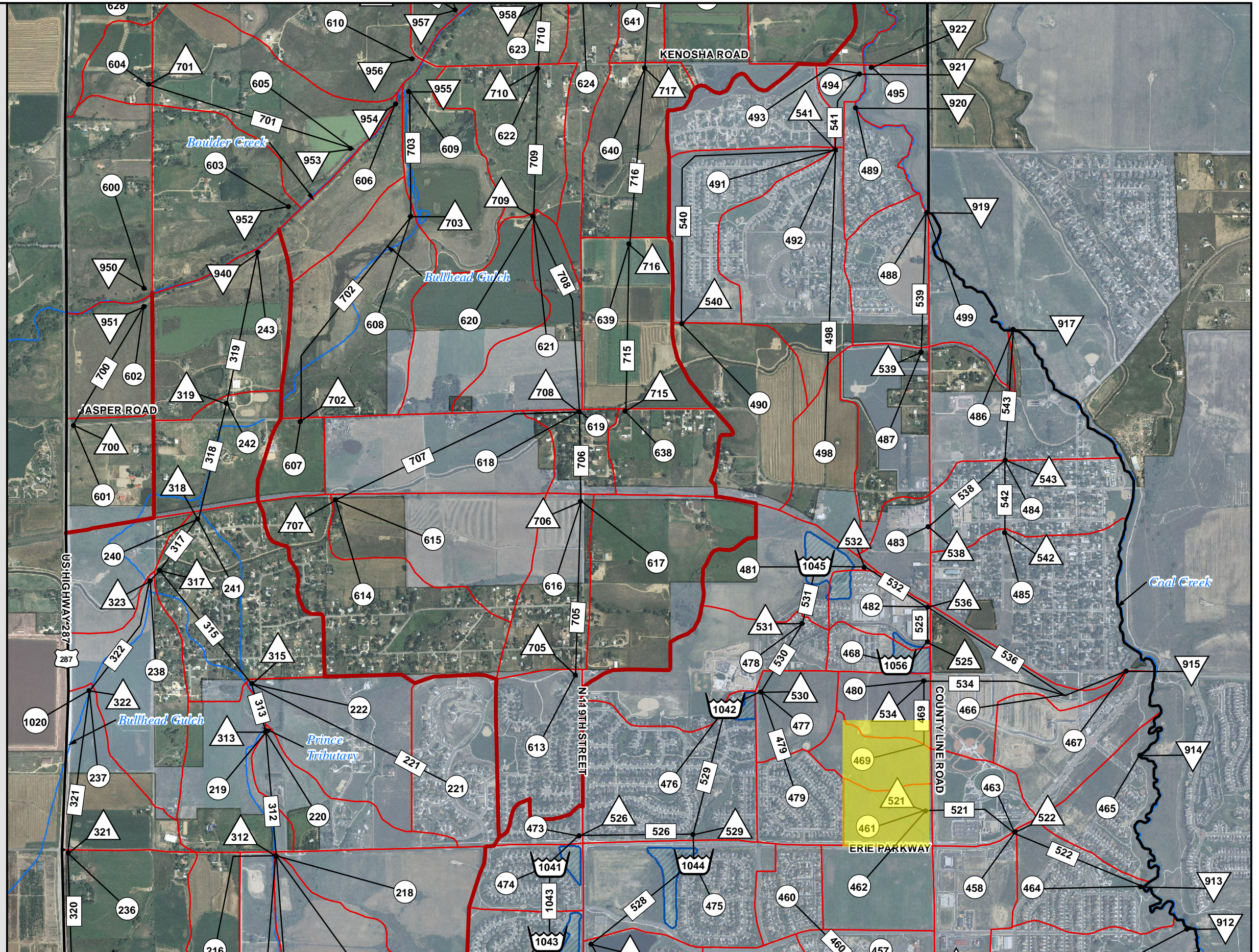
## SWMM Elements

-  Subbasin
-  Design Point
-  Conveyance Element
-  Detention Facility
-  Outfall

## KEY MAP



0 750 1,500 3,000  
Feet  
1" = 1,500 FT



M:\2234\GIS\2234\_MXD - 12/12/12 - NRT

# WESTERN ENVIRONMENT AND ECOLOGY, INC

July 25, 2016

Robert Ketner  
Inland Group  
120 West Cataldo Avenue, Suite 100  
Spokane, Washington 99201

Subject: Copper Ranch Mine Subsidence Potential and Proposed Investigation 28.650  
Acres Northeast Quarter, Section 24, Township 1 North, Range 69 West, Erie,  
Colorado. Western Environment and Ecology, Inc. Project Number 627-001-02

Dear Mr. Ketner;

At your request, Western Environment and Ecology, Inc. (Western Environment) has prepared the following "Mine Subsidence Potential" of the proposed Planned Unit Development (PUD) referenced above. Included in this review is an August 5<sup>th</sup>, 2014 letter from Jill Carlson of the Colorado Geological Survey (CGS) and the results of a Western Environment report titled "Mine Subsidence Investigation Lumry Estate Property Section 24, Township 1 North, Range 69 West, Erie, Colorado" dated November 15, 1996 (revised July 15, 1997).

It is our understanding, since first working on this project in 2013, that Inland is interested in developing the site including approximately 216 apartment units. The current sketch plan indicates 12 apartment buildings, a club house and a 9,500 square foot commercial building are proposed for the PUD. The 1996 subsidence investigation conducted by Western Environment identified three abandoned coal mines beneath or directly adjacent to the project. The records maintained by the CGS indicated that the Garfield (Upper and Lower seam), Lister and Stewart Mines impact the site. Our drilling located the Garfield Upper seam at 85 to 95 feet, the Lower seam at 110 to 115 and the Stewart seam at 150 to 155 feet.

During a November 20<sup>th</sup>, 2013 meeting between Inland, Western Environment and Jill Carlson of the CGS we discussed the requirement that additional (to the 1996 drilling) borings be performed to 1) confirm the location of the mines and 2) their condition. As such, we proposed a drilling program including four additional borings and provided a map (dated November 18, 2013) locating the holes. This map showed 10 multi-family buildings and a club house. As previously mentioned the current sketch plan locates 14 buildings on the 28 acre project. This modification would require that 2 to 3 additional borings be proposed to complete the assessment. The attached Figure 1 represents the approximate extent of mine workings shown on the original Garfield #1 Mine map dated 1886 (attached), however, it has been our experience that numerous discrepancies often are present on these maps.

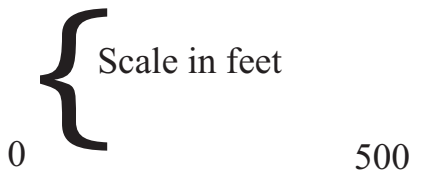
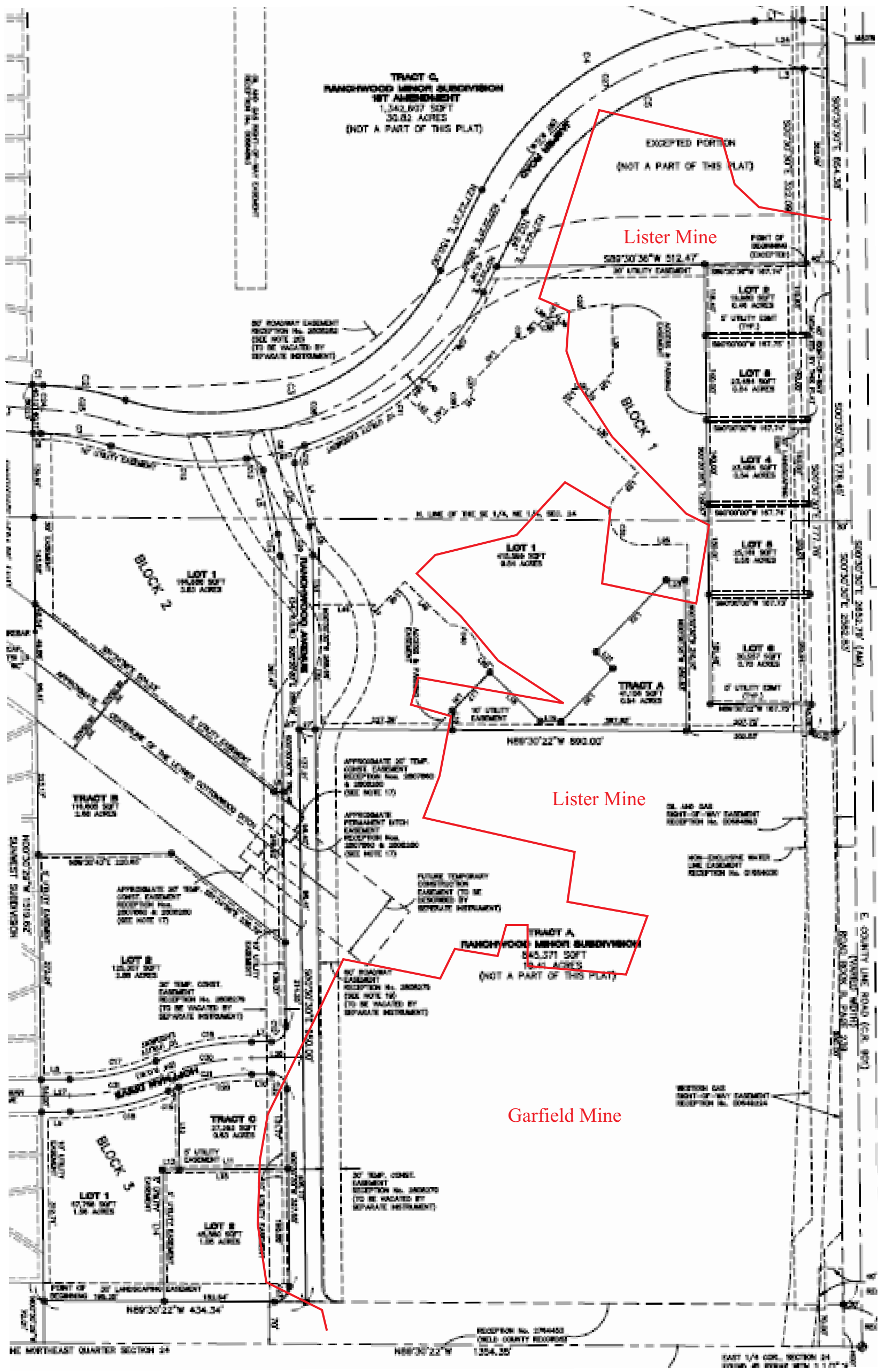
It is the opinion of Western Environment that development of the Copper Ranch PUD is possible if the proposed subsidence investigation confirms that the majority of the development is **NOT** undermined, and that those areas that are undermined are **collapsed with limited potential for significant future subsidence**. Due to the inherent uncertainty with mine subsidence prediction, we would also recommend the use of strain mitigation techniques possibly including isolation trenches and building segmentation.

Thank you again for the opportunity to provide this assessment. Do not hesitate to contact us with any questions you may have.

Respectfully Submitted

Greg D. Sherman P.G.  
President  
att.

**2247 WEST POWERS AVENUE \* LITTLETON, COLORADO 80120**  
**PHONE (303)730-3452 \* FAX (303)730-3461**  
**WWW.WESTERNENVIRONMENT.COM**



WESTERN ENVIRONMENT  
AND ECOLOGY, INC.  
2217 West Powers Avenue  
Littleton, Colorado 80120

FIGURE 1  
Ranchwood Preliminary Plat  
Erie, Colorado

Mine Name Also Known As CMLRD ID No.	Region & Field County	Map Scale Sheet No.	Map Date Production Years Production Total
Garfield M. (Upper Seam) 019-0422-85(b)-03	Danvers - Boulder (Level) Boulder 1 SE 1 NE Sec. 24 T. 1 N. R. 69 W.	1" = 100' 1 of 1	1886 1882-1887 123,711 tons

